

Construction



DECEMBER 1949

November's \$267,566,000 value for southern construction contracts was the highest recorded for that month in the last two decades.

The eleven-month figure for contracts is also favorable, the \$2,759,905,000 being not only ten per cent above that for the comparable period of last year but ahead of the value placed on the South's contracts in first eleven months within the last five years.

Private building for the eleven months amounts to \$843,701,000; public building, \$677,108,000. Both are up when compared with the same months of last year—the one, twenty-five per cent, the other, twenty per cent.

Highway construction in the eleven months was valued at \$449,117,000, a level that is slightly above the value for the same months of 1948. Industrial construction is down by several per cent. The value for such awards is \$441,284,000 for the eleven months.

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The 200-ft. rolled earth Downsville Dam will stretch across a half-mile-wide valley of the east branch of the Delaware River. View shows core wall under construction by Walsh-Perini, who also have the contract for 25-mile diversion tunnel.

Doing Every Kind of Job



A fleet of GM Diesel-powered Euclids is used at Downsville by Walsh-Perini, and by White Oak Escarpments, Inc. on highway relocation.

at Downsville Dam

On big construction projects everywhere, you'll find an ever-growing number of General Motors Diesels taking over more and more of the tough jobs.

Shown here are some of the many different jobs these rugged 2-cycle

Diesels are doing on Downsville Dam and the \$44 million tunnel to carry water toward New York City. Contractors Walsh Construction Co. and B. Perini and Sons, New York, and others on this project, rely on GM Series 71 Diesels because they start fast, pinch pennies on fuel and stay on their feet with little attention.

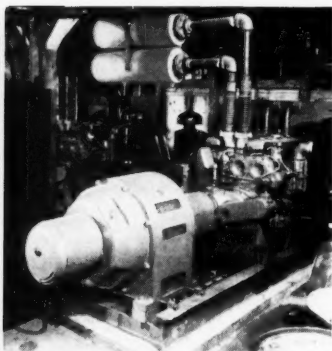
If you are interested in dependable power at the lowest cost per horsepower, it will pay you to check the records GM Diesels are making. Write for complete information.

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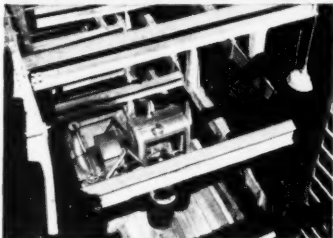
Two GM Diesel Twins drive 200 kw. stand-by electric generators providing emergency power for pumps and compressors.



GM Diesel replaced the original power in this crane, shown placing rock on inlet channel wall.



GM Series 71 2- and 3-cylinder Diesel engines power screens and conveyors on gravel-washing plant of sub-contractor, Cooney Bros.



One of a battery of 13 GM Diesel 5- and 4-cylinder engines used by Walsh-Perini to power water pumps.

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WE THINK *it's a good sign*

Unofficial figures* indicate that on the evening of December 24, 1949, hardly anybody will be thinking about the low price of cement. Of 100 persons interviewed on that date last year, more than 99.9% said their minds were occupied with reindeer, chimneys, bulging stockings, mysterious packages, mistletoe and glittering trees.

We at Cumberland think that's a good sign. Merry Christmas!

*Not from U. S. Bureau of Labor Statistics

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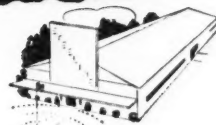
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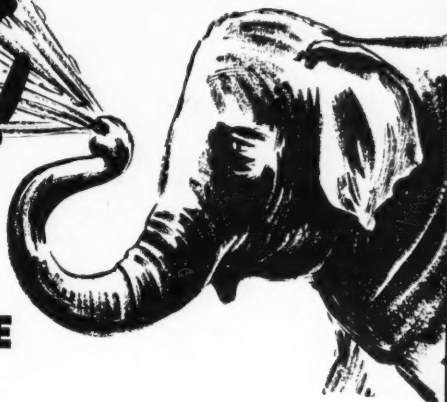


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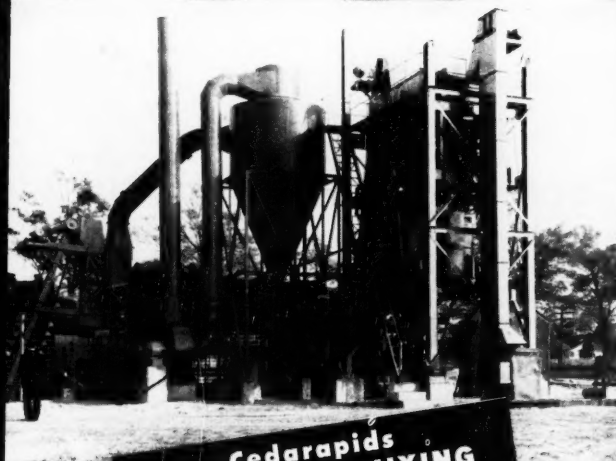
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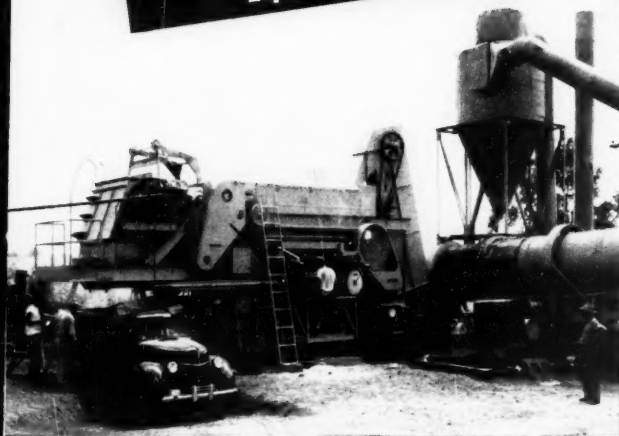
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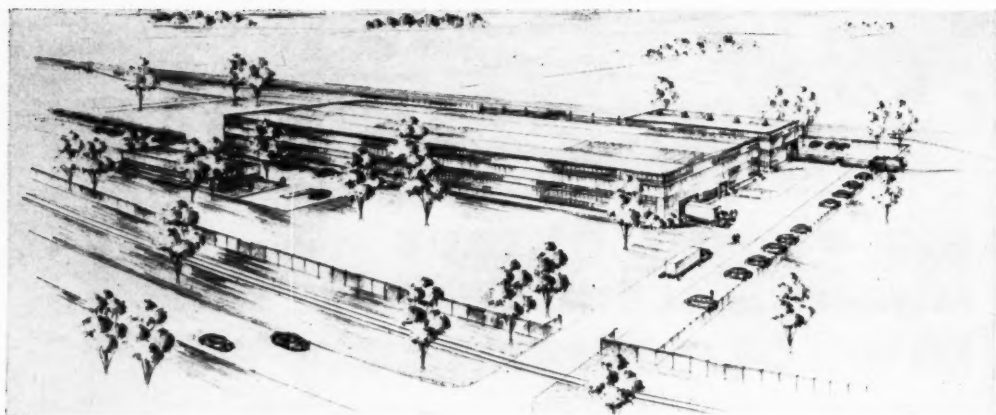
PORTABILITY plus! The Model "FA" is the most portable batch type bituminous mixer in the Cedarapids line, and can be set up for operation in a matter of hours. Just lift the top section of the elevator, extend the bottom section and install the cover; drop the operator's platform and lower section of the skip track into position; raise the skip head pulley frame; level up the scale frame and the "FA" is ready to grade the aggregates, weigh the material, mix it to meet the most rigid specifications, and do it all at lower cost. The perfectly matched screen, 25 cu. ft. batcher and pug mill, and elevator will produce as much as 350 tons per day. Centralized air controls insure fast, easy, one-man operation. Quality construction of every part means long-term service at lowest cost operation and maintenance.

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Above—Contracts have been let to the Austin Company, Cleveland engineering and construction firm, for the welded steel pipe mill at Houston, Texas, for the A. O. Smith Corporation of Texas, which will operate the plant for A. O. Smith Corp., Milwaukee, and Armco Steel Corp., whose Texas subsidiary, Sheffield Steel Corp., will supply the steel from its adjacent plant. The pipe mill will contain 150,000 square feet and will be 675 feet long. Two 80-foot craneway aisles and an intermediate 40-foot aisle will extend the full length. The 200 by 80-foot pickling building will be equipped with a 40-ton crane. A 40 by 200-foot air-conditioned office building is included in the contract.

South's November Contracts at Record Level

Below—Miami Shores Baptist Church, part of which is now under construction in that Florida community. The building is of contemporary architectural design with exterior walls of stucco on concrete block and adobe tile trim. The roof is to be tile; floors, asphalt tile and colored concrete. The fireproof floor construction is concrete and steel beams, precast concrete joist and 2½-inch concrete floor slab on steeltex. Roof of the educational wing is supported by trussed wood rafters. The chapel roof is a flat wood deck, supported by steel girders and wood rafters. The building rests on spread footings. M. R. Winmer, of Miami, is the contractor.



SOUTH'S CONSTRUCTION BY TYPES

	November, 1949 Contracts Awarded	November, 1949 Contracts to be Awarded	Contracts Awarded First Eleven Months, 1949	Contracts Awarded First Eleven Months, 1948
PRIVATE BUILDING				
Assembly (Churches, Theatres, Auditoriums, Fraternal)	\$ 13,569,000	\$ 20,282,000	\$ 106,661,000	\$ 113,024,000
Commercial (Store, Restaurants, Filling Stations, Garages)	7,122,000	12,640,000	85,979,000	99,293,000
Residential (Apartments, Hotels, Dwellings)	65,507,000	122,709,000	548,706,000	420,067,000
Office	6,163,000	6,560,000	102,352,000	38,816,000
	\$ 92,361,000	\$161,891,000	\$ 843,701,000	\$ 671,200,000
INDUSTRIAL	\$ 22,086,000	\$169,064,000	\$ 441,284,000	\$ 452,986,000
PUBLIC BUILDING				
City, County, State, Federal and Hospitals	\$ 32,010,000	\$ 64,638,000	\$ 378,874,000	\$ 235,388,000
Schools	35,263,000	95,122,000	298,234,000	329,237,000
	\$ 67,273,000	\$159,760,000	\$ 677,108,000	\$ 564,625,000
ENGINEERING				
Dams, Drainage, Earthwork, Air- ports	\$ 16,076,000	\$156,844,000	\$ 150,634,000	\$ 188,933,000
Federal, County, Municipal Elec- tric	14,810,000	16,527,000	86,698,000	60,497,000
Sewers and Waterworks	14,020,000	30,553,000	111,343,000	132,801,000
	\$ 44,906,000	\$203,924,000	\$ 348,695,000	\$ 382,231,000
ROADS, STREETS AND BRIDGES	\$ 11,000,000	\$ 83,468,000	\$ 449,117,000	\$ 433,359,000
TOTAL	\$267,566,000	\$778,107,000	\$2,759,905,000	\$2,504,401,000

SOUTHERN construction totaled \$267,566,000 in November, a figure that was thirty per cent greater than that for the preceding month and about five per cent more than the value of contracts awarded in the sixteen states below the Mason and Dixon line in the eleventh month of last year. In fact, the November, 1949 total is the highest recorded in the eleventh month of the last two decades.

The current year's accumulation of monthly construction contract valuations is running ahead of any comparable eleven months in the last one-half decade. The total is \$2,759,905,000, or ten per cent above the \$2,504,401,000 for the first eleven months of 1948 and practically sixty per cent ahead of the \$1,726,576,000 registered in the same period of 1947. First eleven-month totals for 1946, 1945 and 1944 were \$1,663,051,000, \$1,026,105,000 and \$786,484,000, respectively.

The \$2,759,905,000 for the eleven months embraces \$843,701,000 for private build-

ing, \$677,108,000 for public building, \$449,117,000 for highways and bridges; \$441,284,000 for industrial construction and \$348,695,000 for heavy engineering projects. Private building, public building and highway and bridge award valuations represent increases; industrial and engineering construction are down, when compared with the values for the similar period of last year.

Private building, with its \$843,701,000 total twenty-five per cent ahead of the same kind of work in the first eleven months of last year, embraces \$548,706,000 for residential construction; \$106,664,000 for assembly buildings such as churches, theatres and auditoriums; \$102,352,000 for office buildings and \$85,979,000 for commercial building projects.

Residential construction in the eleven months is up. Its \$548,706,000 value is thirty per cent larger than the figure in the same months of last year. Office building construction made a still better record. The \$102,352,000 for such work is more than two and one-half times the value for the comparable period of 1948. Current commercial construction and assembly building are down thirteen and five per cent, respectively.

Public building, value \$677,108,000, shows a twenty per cent rise above its 1948 counterpart for the eleven months. School projects contributed \$298,234,000 to the total, or a drop of nine per cent. Other publicly financed buildings totaled \$378,874,000 and represented an increase.

Highway construction in the eleven months was valued at \$449,117,000, as tabulated from reports in the *Daily Construction Bulletin*. This figure is about two per cent above the value for the comparable period of last year. Texas leads the southern states in the highway field with a total of \$104,311,000. Maryland's highway construction this year is also well above those of the other southern states due to an intensified program which includes construction of the first bridge across the Chesapeake Bay.

Industrial construction shows a slight drop. The \$441,284,000 for the eleven months represents a decrease of about two and one-half per cent.

Heavy engineering projects are also down in the South, although the prospects are good for coming months in view of the huge sums appropriated for flood control and rivers and harbor work by the recent Congress.

The current eleven-month figure for engineering type projects is \$348,695,000, which includes \$150,654,000 for dams, drainage, earthwork and airports; \$111,343,000 for sewer and water work and \$86,698,000 for government electric work is a nine per cent drop. Federal electric work is the only category showing a gain. Its \$86,698,000 was up forty-three per cent. The others are down twenty and sixteen per cent, respectively.

November's \$267,566,000 ranks fifth among the months of 1949. Six per cent above the monthly average for the year so far, the total is the highest for the eleventh month back to 1930 and perhaps even before. Its components are \$92,361,000 for private building; \$67,213,000 for

SOUTH'S CONSTRUCTION BY STATES

	November, 1949 Contracts Awarded	November, 1949 Contracts to be Awarded	Contracts Awarded First Eleven Months, 1949	Contracts Awarded First Eleven Months, 1948
Alabama	\$ 11,153,000	\$ 23,645,000	\$ 78,997,000	\$ 125,324,000
Arkansas	7,284,000	29,203,000	69,009,000	76,246,000
District of Columbia	5,351,000	11,625,000	59,988,000	38,586,000
Florida	24,228,000	44,014,000	232,281,000	251,915,000
Georgia	14,573,000	25,171,000	110,520,000	114,143,000
Kentucky	6,895,000	8,890,000	88,323,000	58,637,000
Louisiana	29,956,000	57,764,000	233,873,000	208,303,000
Maryland	39,326,000	29,288,000	273,482,000	191,542,000
Mississippi	5,496,000	14,371,000	102,035,000	69,990,000
Missouri	12,579,000	58,082,000	96,373,000	113,153,000
N. Carolina	14,441,000	35,614,000	167,473,000	139,737,000
Oklahoma	7,421,000	20,178,000	88,486,000	94,990,000
S. Carolina	4,249,000	32,244,000	93,695,000	80,487,000
Tennessee	10,618,000	146,786,000	206,256,000	128,523,000
Texas	62,144,000	205,651,000	725,990,000	647,716,000
Virginia	7,688,000	27,894,000	107,718,000	101,311,000
West Virginia	4,194,000	7,687,000	22,194,000	63,798,000
TOTAL	\$267,566,000	\$778,107,000	\$2,759,965,000	\$2,564,401,000

public building; \$44,906,000 for engineering projects; \$41,000,000 highways and bridges and \$22,086,000 for industrial construction.

Private building represents thirty per cent of the November figure and is twenty-two per cent above such work in October. The November figure includes \$65,507,000 for residential construction, \$13,569,000 for assembly projects (churches theatres, auditoriums); \$7,122,000 for commercial buildings and \$6,163,000 for office buildings.

Residential, assembly and office building values rose, commercial building dropped in November. The \$65,507,000 is fifty-four per cent above such work in October. Office building showed a rise of ninety per cent, with assembly building value twelve per cent more favorable. Commercial building was down fifty-nine

per cent.

November's public building value of \$67,213,000 included \$35,203,000, or fifty-two per cent for school building. Both the latter and government buildings showed an increase in value, as compared with October. The rise in school contracts was twenty-nine per cent; for other government financed buildings, eighty-six per cent.

Engineering construction in November represented an eighty per cent increase. All types of such work were higher. The \$16,076,000 for dams, drainage, earthwork and airports was up seventy-one per cent; rise for sewer and water work the total for which was \$14,020,000, was sixty-four per cent. Government electric projects doubled and amounted to \$14,810,000.

Highway and bridge contract value-

(Continued on page 42)

Below—Steelwork of three of the five bays being added to the Miami, Okla., warehouse of the B. F. Goodrich Co. A total of 185,000 square feet is being added to the storage facilities and 14,000 square feet to the manufacturing area at the Goodrich tire plant.





Government by Decree

The Truman Administration, through its Solicitor General, has made known its intention of denying F.H.A. to all who might wish to say who may and who may not live in the homes and apartments that they build. The President happily admits that the whole idea was his, thereby accepting complete responsibility for this politically inspired action.

This executive fiat is of vast importance, to the construction industry and to the nation as a whole.

It means, so far as our segment of the economy is concerned, that local customs and traditions must be flouted in many portions of the country, north as well as south. Since people, when they buy or rent living space, are more hidebound by local custom and tradition than at any other time, the only result can be a construction slump in those parts of the nation directly affected.

To the country as a whole it is an indication of how far we have diverged from the intent of the framers of our Constitution. Instead of a system of checks and balances in our federal government, we now have no balance and nothing but blank checks. Congress still enacts laws, but the President interprets and supplements them and then enforces his interpretations.

The Administration's action is a tip-off to what happens when an industry or institution becomes too dependent on federal funds. He who pays the piper still calls the tune. Do-gooders can bleat to their hearts' content that federal money does not mean federal interference, be the pet project school aid, power developments, unemployment funds or housing. When local interests run contrary to those of the man in the driver's seat, local interests are ignored.

There is, fortunately, a way out. Prompt Congressional action in 1950 will avert the otherwise inevitable building slump. Our elected representatives and senators have a glorious opportunity to move decisively and show the clique who have seized power how the people feel when the will of their legislators has been perverted and usurped.

The laws governing the F.H.A. must be rewritten so as to prevent maladministration for political purposes.

The National System of Interstate Highways

WHEN the Congress directed the designation of a National System of Interstate Highways in the Federal-Aid Highway Act of 1944, a time cycle of one and one-half centuries has elapsed since the recognition of the national significance of major interstate highway routes. In this period governmental interest completed the circle from Federal responsibility through many and varied stages of local and State control, to the present legal specification of a system of interstate highways so located as to connect by routes as direct as practicable the principal metropolitan areas and industrial centers, to serve the national defense, and to connect at suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico.

Interstate System Mileage

The National Interstate System as now designated by the State highway departments in cooperation with Federal authorities comprises 37,800 miles of main thoroughfares—31,831 miles in rural areas and 5,969 miles in urban areas. Approximately 2,200 miles of the 40,000 miles authorized for the system have been reserved for connections through cities and circumferential routes around them.

Although the system includes only one per cent plus of the country's total mileage of roads and streets, its rural sections, if adequately improved, would serve more than 21 per cent of the traffic carried by all rural roads. Its urban sections as thus far designated would serve more than 10 per cent of the traffic moving over all city streets.

All but 1,900 miles of the 31,831 miles of the system in rural areas require improvement to bring these routes up to standards recommended for existing volumes of traffic. Of the 5,969 miles of roads and streets in urban areas, all but 398 miles require some degree of improvement. Of the 10,050 bridges on rural sections of the system, only 483 are completely adequate.

Traffic Conditions Vary

On its rural sections the system served in 1948 a traffic averaging 2,915 vehicles per day. The traffic served, however, varied from a minimum of less than 200 vehicles per day on a few sections to more than 70,000 vehicles per day on one section. There were 359 miles that carried less than 400 vehicles per day, but there were 437 miles that served an average of more than 20,000 vehicles per day, and 14,892 miles—nearly half of the rural mileage—served more than 3,000 vehicles per day.

The designated system connects directly all cities of 250,000 population or more, and all but six of cities of 100,000 population or more. Of the 107 cities of between 50,000 and 100,000, sixty-nine lie directly on the system, and similarly located are 2,538 other cities, towns, and urban places.

Of the total of 83,766,000 classified as urban population by the 1940 census, 54,

by
Thomas H. MacDonald
Commissioner of Public Roads

378,000, or 65 per cent, was in the cities lying directly on the Interstate System; and in the 1,160 counties traversed by the system—just over a third of all counties—there was a rural population of 23,953,000, or 50 per cent of the 1940 rural population.

The population, urban and rural, residing thus closely to the system, in 1940 was over 78 million or 60 per cent of the total of our 1940 population.

Cost of Improvement

Routes in the Interstate System are most deficient in sight distance and in the width of pavements, shoulders, and bridges. On the basis of construction costs in 1948, the cost of improvements to correct these deficiencies and to adapt the system to existing traffic needs is estimated at \$11,266,000,000. Of this sum, approximately \$5,293,000,000 would be expended on sections of the system within the urban areas of cities having 5,000 or more population, and \$5,973,000,000 on rural sections of the system.

If routes in the Interstate System are to be brought to a state of adequacy in a period no longer than 20 years, a capital investment averaging probably more than \$500,000,000 a year will be required.

Capital requirements of such magnitude obviously cannot be met from the annual revenues at their present levels. The improvements are needed now. Deferral means the acceptance of greater costs in lives, in inconvenience, and in the actual expense of vehicle operation.

Completion of proposed improvements on the Interstate System in a period far shorter than 20 years would result in much greater economic and social benefits. The needs of the national defense require a substantially more rapid improvement.

Public dissatisfaction over highway inadequacies, traffic congestion, and accidents has prompted a marked increase in the planning and construction of major highway facilities, both rural and urban, that will form links in the Interstate System. During the past two years, progress in initiating and planning wide and safe rural highways and urban expressways has been at a greater rate than ever before.

Current Improvement Program

As of October 1, \$1,185,247,765 of the primary and urban funds authorized by the Federal-Aid Highway Acts of 1944 and 1948 had been assigned to programmed projects. Of this total, \$362,352,522, or nearly 31 per cent, was for Interstate System improvements having an estimated total cost of \$792,771,000. These improvements included 3,943 miles of highways—nearly 9.6 per cent of the total mileage in the system. Projects for which plans were approved included 1,092

bridges and 129 railway-highway grade crossing eliminations.

Urban Arterial Routes

Improvement of main urban arteries was greatly accelerated during the past year. In large cities in every part of the country major projects to eliminate traffic congestion passed from preparatory stages to active construction. Important projects have been completed and the service they are rendering is spectacular. The first 3.6-mile section of the Gulf Freeway in Houston, Texas, has been in service just over one year. When opened the traffic was 28,000 vehicles per day. Now it has reached the 50,000-vehicles-per-day mark, and is yet climbing. In an estimated 50-million-vehicle-miles of traffic service the first year there has been one traffic death. This is only one of the new values already secured. There are indicated trends of land use and values that hold promise of sound urban development with the preservation of existing property values at the heart of the business districts.

The Federal policy of aiding the cities in solving their traffic difficulties, adopted in 1944, and the increased State participation in urban highway work, give strong reinforcement to the efforts of the cities themselves. By comparison with what was accomplished in prewar years, the volume of work on city expressways and arterial routes that will form part of the Interstate System is impressive.

However, any feeling of satisfaction with the present rate of progress, or thought that traffic troubles on main urban routes will be removed in a few years, vanishes when one compares what needs to be done with the rate at which work is being completed.

Within urban areas as defined by the 1944 Act, some 3,500 miles of the system need improvements at a cost in excess of \$5,000,000,000. Construction will have to be stepped up to a much faster pace if these most needed urban improvements are to be completed within a reasonable period of years.

While the total cost of making urban improvements is large, the price that will have to be paid per mile of vehicle travel is small in comparison with the cost of tolerating the present congestion and delay.

If the vehicles using urban sections of the Interstate System paid only 1-1/3 cents per mile of travel over a 20-year period, this would be sufficient to provide the highest type of modern highway facilities. This estimate is based upon the 1948 volume of traffic. Considering the volume of traffic that is likely to develop in the next few years, it is probable that little more than one cent per mile of traffic would be sufficient.

The capital investment to provide free-ways or, as some prefer, expressways, measured in terms of per-vehicle-per-day, is less than the cost for many even so-called low-cost secondary roads measured by the same yardstick.

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The National System of Interstate Highways

(Continued from page 11)

The preceding factual statement of the Interstate Highway System provides a meager yardstick for measuring the true significance of the system.

As stated above, nearly one and one-half centuries have passed since recognition was given by the Federal Government to the national importance of the major interstate routes. After the Revolutionary War the need for highway transportation to promote the development of the country was clearly recognized. Since the new States and their local governing agencies were not financially able to assume the burden of building overland routes, the Federal Government undertook the task.

Prior to 1800 the territory adjacent to the Ohio River was opened to settlement, and the pioneers with their scanty household belongings thronged the trails across the Appalachian Mountains into the new "northwest" country. By 1800 the most important westward line of travel had become well defined, and in 1805 Congress appropriated funds for its improvement.

This was the first Federal road construction. The road was known as the National Pike. It extended from Cumberland, Maryland, across the Appalachian Mountains to Wheeling, then in Virginia. It was later projected and partly built westward through the State capitals of Ohio, Indiana and Illinois, to St. Louis, on the Mississippi River. Today this road is a section of U S 40, an outstanding east-west transcontinental route. No one can question the value of this Federal undertaking to the growing Nation.

Federal roadbuilding activities lapsed

when the newly built railroads appeared to be the solution for long-distance traffic and the means of unbelievably fast transportation. Federal assistance was extended to railroad builders, but Federal participation in the construction of highways was not resumed until 1912 when Congress appropriated \$500,000 to be expended by the Secretary of Agriculture, in cooperation with the Postmaster General, to aid in the improvement of post roads in rural areas.

This initial experiment in Federal-State cooperation in the construction of roads laid the ground work for the 1916 legislative Act, which provided a well-balanced plan of administration.

The Federal Highway Act of 1921 retained the important principles of the earlier act and added the important requirement that Federal highway authorities and the State highway departments should jointly designate a system of main roads upon which all future Federal appropriations would be expended.

These two legislative acts marked the emergence of our present primary Federal-aid system and established the general pattern of Federal assistance to the States in road construction. Basic principles embodied in the two acts have been retained in all subsequent Federal highway legislation.

The more important routes in State highway systems that had been improved prior to 1921 were incorporated in the Federal-aid system. As a result of the Federal action, the position of the States in the improvement of main highways was materially strengthened. Provision of Federal funds for work on a designated system of roads encouraged the States to undertake a program of highway im-

provements on a scale that would not have been possible without Federal assistance, and with a degree of uniformity throughout the Nation that could not have been obtained otherwise.

Since 1921 every route in the Federal-aid primary system, which now comprises approximately 232,000 miles of main highways, has been greatly improved. Many sections of these routes have been reconstructed repeatedly through the years to accommodate steadily increasing volumes of traffic. That many of the highways constructed before the recent World War are obsolete today is because of a fantastic increase in total traffic and higher speeds. The main routes particularly have been seriously depreciated by overloading and repetitive heavy loading.

Adoption of the interregional highway plan is, in effect, a major reorientation of our highway program. However, except as to size of undertaking, it does not constitute a departure from basic governmental policies successfully applied on a small scale in our early history, and on an expanding scale since the beginning of the modern period of road building, initiated by the Federal-aid Road Act of 1916 and the Federal Highway Act of 1921.

Finally, the relation of the Interstate System to the national defense is indicated by the following excerpt from the report of the Secretary of Defense: "The National Military Establishment considers a relatively small 'connected system of highways interstate in character,' constructed to the highest practical uniform design standards, essential to the national defense. Because of the time required, and cost, such a system must be planned for and constructed during peacetime."

\$195,964,000 for Southern Rivers, Harbors, Flood Work

THE South will get \$195,964,000 of the \$635,428,190 recently appropriated by Congress for civil works operation of the Corps of Engineers during the fiscal year of 1950. Of the \$437,430,400 for flood control, \$161,899,400 is for projects below the Mason and Dixon line. The river and harbor work is to cost \$197,985,690, with \$30,981,200 going into southern projects.

Congress designated \$437,430,400 for the 1950 nationwide flood control program, of which \$67,000,000 is for the Mississippi River and its tributaries, with \$500,000 for the emergency fund for flood control on tributaries of the Mississippi. The Sacramento River flood control project was allocated \$3,600,000 of the funds.

Eighty-one per cent of the 1950 appropriation, or \$518,581,090, is for new construction. Construction funds were provided for 165 flood control projects in thirty-seven states. The Mississippi River and tributaries flood control project extends over parts of seven states—Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi and Louisiana.

The ninety-two river and harbor construction projects are located in thirty-four states, the District of Columbia and Alaska. Planning funds were provided for fifty-three flood control projects in twenty-two states and Hawaii and for sixteen river and harbor projects in ten states.

Nine of the twenty largest individual construction appropriations were for projects in the southern states. These were the Mississippi River work, \$52,000,000; Buggs Island reservoir in Virginia and North Carolina, \$15,500,000; Wolf Creek reservoir, Kentucky, \$15,030,700; Clark Hill reservoir, Georgia and South Carolina, \$13,000,000; Bull Shoals reservoir, Arkansas and Missouri, \$12,777,500; Fort Gibson reservoir, Oklahoma, \$12,000,000; Whitney reservoir, Texas, \$10,500,000; Jim Woodruff lock and dam, Florida, \$7,500,000; Allatoona reservoir, Georgia, \$6,750,000, and Center Hill reservoir, Tennessee, \$6,300,000.

The others are: McNary lock and dam, Oregon and Washington, \$35,000,000; Gar-

rison reservoir, North Dakota, \$23,000,000; Fort Randall reservoir, South Dakota, \$23,000,000; Harlan County reservoir, Nebraska, \$11,250,000; Detroit reservoir, Oregon, \$9,500,000; Lookout Point reservoir, Oregon, \$9,500,000; Chain of Rocks project, between Missouri and Illinois, \$9,000,000; Conemaugh River reservoir, Pennsylvania, \$7,400,000; Pine Flat reservoir, California, \$7,000,000; and Los Angeles County drainage area, California, \$6,300,000.

Flood control and river and harbor project in the sixteen southern states show totals of \$1,000,000 for Alabama; \$21,853,000 for Arkansas; \$10,825,000 for Florida; \$21,190,000 for Georgia; \$27,401,100 for Kentucky; \$8,450,000 for Louisiana; \$2,717,400 for Maryland; \$496,000 for Mississippi; \$3,539,000 for Missouri; \$15,532,500 for North Carolina; \$24,038,000 for Oklahoma; \$7,930,000 for South Carolina; \$7,230,000 for Tennessee; \$35,741,000 for Texas; \$3,928,600 for Virginia; \$7,865,000 for West Virginia and \$375,000 for the District of Columbia.

Funds totaling \$3,084,000 for planning in the South were also provided. These included \$600,000 for Alabama; \$900,000 for Arkansas; \$10,000 for Florida; \$116,000 for Kentucky; \$65,000 for Louisiana; \$283,000 for Missouri; \$70,000 for North Carolina; \$385,000 for Oklahoma; \$80,000 for Tennessee; \$450,000 for Texas; \$50,000 for Virginia and \$75,000 for West Virginia;

The projects by states are as follows:

ALABAMA

Rivers and Harbors—Demopolis lock and dam, Warrior system, \$1,000,000.

ARKANSAS

Flood Control—Bayou Bodeau Reservoir; Blakely Mountain Reservoir, \$2,300,000; Blue Mountain Reservoir, \$35,700; Bull Shoals Reservoir, \$12,777,500; Carden's Bottom drainage district No. 2, \$270,000; Conway County levee district No. 6, \$11,000; Crawford County levee district, \$300,000; Little Rock to Pine Bluff, \$333,000; Narrows Reservoir, \$3,460,000; Nimrod Reservoir, \$59,500; Norfolk Reservoir, \$744,100; Red River levees and bank stabilization below Denison Dam, \$520,900; and West of Morilton, \$595,300.

Rivers and Harbors—Arkansas River and tributaries: Bank stabilization, Little Rock to mouth; \$600,000; Bank stabilization below Dardanelle, \$500,000; Morrilton cut-off, \$250,000.

DISTRICT OF COLUMBIA

Rivers and Harbors—Potomac River, north side of Washington Channel, \$375,000.

FLORIDA

Flood Control—Central and southern, \$1,500,000.

Rivers and Harbors—Intracoastal Waterway, tributary channels: Okeechobee-Cross Florida Waterway, \$300,000; Jim Woodruff lock and dam, Apalachicola River, \$7,500,000; St. Andrew Bay, \$125,000; St. Johns River, Jacksonville to ocean, \$900,000; Tampa Harbor, \$500,000.

GEORGIA

Flood Control—Allatoona Reservoir, \$6,750,000; Clark Hill Reservoir, \$13,000,000; Macon, \$240,000.

Rivers and Harbors—Savannah Harbor, \$450,000; Buford Dam, Chattahoochee River, \$750,000.

KENTUCKY

Flood Control—Ashland, \$744,100; Covington, \$1,041,700; Dale Hollow Reservoir, Dewey Reservoir, \$900,000; Hawesville, \$650,000; Louisville, \$4,092,500; Maysville, \$744,100; Newport, \$2,200,000; Russell, \$185,000; Taylorsville, \$45,000; Uniontown, \$120,000; Wolf Creek Reservoir, \$15,030,700.

Rivers and Harbors—Cumberland River, Cheatham lock and dam, \$1,400,000; Ohio River, open channel work, \$250,000.

LOUISIANA

Flood Control—Aloha Rigollette area, \$500,000; Bayou Bodcau Reservoir, \$360,000; Jonesville, \$105,000; Lake Pontchartrain, \$540,000; Shreveport, \$325,000; Mergentau River, \$1,500,000.

Rivers and Harbors—Calcasieu River and Pass, \$900,000; Intracoastal Waterway, Apalachee Bay, \$2,500,000; Pearl River, \$1,250,000; Waterway from Empire to Gulf of Mexico, \$500,000.

MARYLAND

Flood Control—Cumberland, Md., and Ridgeley, W. Va., \$744,100; Savage River Reservoir, \$1,265,000.

Rivers and Harbors—Baltimore Harbor and channels, \$650,000; Chester River, \$16,400; Hoga River and Tar Bay, \$42,000.

MISSISSIPPI

Rivers and Harbors—Gulfport, \$496,000.

MISSOURI

Flood Control—Chariton River, \$400,000; Clearwater Reservoir, \$60,000; East Poplar Bluff and Poplar Bluff, \$85,000; Perry County levee districts 1, 2, and 3, \$744,100.

Rivers and Harbors—Missouri River, Kansas City to the mouth, \$2,250,000.

NORTH CAROLINA

Flood Control—Buggs Island Reservoir, \$15,500,000.

Rivers and Harbors—Stumpy Point Channel, \$32,500.

OKLAHOMA

Flood Control—Canton Reservoir, \$165,000; Denison Reservoir, \$650,000; Fort Gibson Reservoir, \$12,000,000; Fort Supply Reservoir, \$116,500; Great Salt Plains Reservoir, \$31,000; Hulah Reservoir, \$4,248,000; Oologah Dam and Reservoir, \$350,000; Polecat Creek, \$900,000; Tenkiller Ferry Reservoir, \$5,500,000; Wister Reservoir, \$77,500.

SOUTH CAROLINA

Rivers and Harbors—Shipyards River, \$300,000; Winyah Bay, \$400,000.

TENNESSEE

Flood Control—Center Hill Reservoir, \$6,300,000; Dale Hollow Reservoir, \$570,000; Memphis, Wolf River and Nonconah Creek, \$360,000.

TEXAS

Flood Control—Belton Reservoir, \$1,488,200; Benbrook Reservoir, \$3,500,000; Garza Little Elm Reservoir, \$2,232,300; Grapevine Reservoir, \$3,500,000; Lavan Reservoir, \$2,604,300; San Angelo Reservoir and floodway, \$3,900,000; Texaraka Reservoir, \$5,000,000; Whitney Reservoir, \$10,500,000.

Rivers and Harbors—Clear Creek and Clear Lake, \$54,700; Galveston Harbor, \$175,000; Houston Ship Channel, \$800,000; Intracoastal Waterway, Apalachee Bay, Florida to the Mexican border: Harlingen, channel to, \$550,000; Sabine-Neches waterway, \$750,000; Trinity River, \$687,000.

VIRGINIA

Flood Control—Galax, \$600,000; Philpott Reservoir, \$2,400,000.

Rivers and Harbors—Bransons Cove, Lower Machodoc River, \$28,600; Norfolk Harbor, \$500,000; York Spit Channel, \$400,000.

WEST VIRGINIA

Flood Control—Sutton Reservoir, \$1,000,000; Bluestone Reservoir, \$1,350,000; Parkersburg, \$1,265,000; Point Pleasant, \$1,450,000.

Rivers and Harbors—Morgantown lock and dam, Monongahela River, \$2,800,000.

ALASKA

Rivers and Harbors—Nome Harbor, \$701,000; Wrangell Narrows, \$343,000.

ARIZONA

Flood Control—Tucson, \$400,000.

CALIFORNIA

Flood Control—Cherry Valley Reservoir, \$520,900; Furrington Reservoir, \$1,700,000; Folsom Reservoir, \$3,100,000; Isabella Reservoir, \$2,350,000; Los Angeles County Drainage area (exclusive of Whittier Narrows Reservoir), \$6,500,000; Merced County stream group, \$175,000; Pine Flat Reservoir, \$7,000,000; Sacramento River and major and minor tributaries, \$600,000; Whittier Narrows Reservoir, \$4,000,000.

Rivers and Harbors—Crescent City Harbor, \$481,000; Monterey Harbor, \$45,520; Sacramento River, \$1,700,000; San Diego River and Mission Bay, \$2,200,000.

COLORADO

Flood Control—Cherry Creek Reservoir, \$900,000; John Martin Reservoir, \$100,000.

CONNECTICUT

Flood Control—Hartford, \$70,000; Norwich, \$290,000.

Rivers and Harbors—Mianus River, \$79,500; New Haven Harbor, \$250,000; Pawcatuck River, \$68,500.

DELAWARE

Rivers and Harbors—Harbor of refuge, Delaware Bay, \$120,000; Indian River Inlet and Bay, \$320,000.

IDAHO

Flood Control—Heise Roberts Area, \$250,000; Lucky Peak Reservoir, \$3,000,000.

ILLINOIS

Flood Control—Coal Creek drainage and levee district, \$547,000; Columbia drainage and levee district, \$372,100; East St. Louis and vicinity, \$520,900; Farm Creek Reservoirs, \$1,860,000; Grand Tower drainage and levee district, \$699,700; Mounds and Mound City, \$450,000; Prairie du Richer and vicinity, \$700,000; Preston levee and drainage district, \$200,000; Reevesville, \$100,000; Rosiclare, \$250,000; Wood River drainage and levee district, \$425,000.

Rivers and Harbors—Illinois waterway: Mouth to mile 291, \$250,000; Mississippi River between Ohio and Missouri Rivers: Chain of Rocks, \$9,000,000; Regulating works, \$750,000; Mississippi River between Missouri River and Minneapolis, \$750,000.

INDIANA

Flood Control—Cagles Mill Reservoir, \$2,500,000; Cannelton, \$250,000; Delphi, \$80,000; Indianapolis, \$750,000; New Albany, \$1,600,000.

IOWA

Flood Control—Corralville Reservoir, \$2,455,500; Dry Run, \$355,000; Little Sioux River, \$372,100.

Rivers and Harbors—Missouri River, Kansas City, Mo., to Sioux City, Iowa, \$2,500,000.

KANSAS

Flood Control—Fall River Reservoir, \$250,000; Kanopolis Reservoir, \$218,000; Kansas City, Mo., and Kans., \$5,000,000; Missouri River agricultural levees, Kans., Missouri, Iowa, and Nebraska, \$5,952,700.

MAINE

Rivers and Harbors—Cape Porpoise Harbor, \$45,500; Josias River, \$33,500; Portland Harbor, \$206,000.

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Rivers, Harbors, Flood Control Work

(Continued from page 13)

MASSACHUSETTS

Flood Control—Adams, \$350,000; Birch Hill Reservoir, \$40,000; Holyoke, \$240,000; North Adams, \$350,000; Riverdale, \$450,000; Tully Reservoir, \$130,000.

Rivers and Harbors—Boston Harbor, \$400,000; Fall River Harbor, \$800,000; Menemsha Creek, Martha's Vineyard, \$72,700.

MICHIGAN

Flood Control—Mount Clemens, \$270,000; Red Run, \$500,000.

Rivers and Harbors—Port Sanilac Harbor, \$360,000; St. Marys River; Power plant, \$1,700,000; Navigation features, \$1,000,000; Traverse City Harbor, \$325,000.

MINNESOTA

Flood Control—Red Lake and Clearwater Rivers, \$1,116,100; Red River of the North, S. Dak., N. Dak., and Minn., \$744,100.

Rivers and Harbors—Beaudette Harbor, \$24,500; Hastings, small-boat harbor at Mississippi River between Missouri River and Minneapolis, \$34,270; St. Anthony Falls, \$1,717,000; Two Harbors, \$1,000,000.

MONTANA

Rivers and Harbors—Missouri River at Fort Peck, \$2,500,000.

NEBRASKA

Flood Control—Harlan County Reservoir, \$11,250,000; Missouri River, Kearsley Bend, Nebraska to Sioux City, Iowa, \$380,000; Omaha, \$1,500,000.

NEW HAMPSHIRE

Flood Control—West Peterboro Reservoir, \$330,000.

NEW JERSEY

Rivers and Harbors—Newark Bay, Hackensack and Passaic Rivers, \$800,000; New York and New Jersey channels, \$1,260,000; Shark River, \$150,000.

NEW MEXICO

Flood Control—Conchas Reservoir, \$35,000; Jemez Canyon, \$750,000.

NEW YORK

Flood Control—Almond Reservoir, \$200,000; Arkport Reservoir, \$30,000; East Sidney Reservoir, \$800,000; Elmira, \$1,475,000; Hoosick Falls, \$350,000; Mount Morris Reservoir, \$4,836,600; Olean, \$744,100; Portville, \$520,000; Syracuse, \$600,000; Whitney Point Reservoir, \$290,000.

Rivers and Harbors—Buffalo Harbor, \$550,000; Dunkirk Harbor, \$350,000; Great Kills Harbor, \$114,500; Hudson River, \$100,000; New York Harbor, entrance channels and anchorage areas, \$412,000.

NORTH DAKOTA

Flood Control—Baldhill Reservoir,

\$210,000; Garrison Reservoir, \$27,500,000; Homme Reservoir, \$475,000; Mandan, \$36,000.

OHIO

Flood Control—Burr Oak Reservoir, \$1,150,000; Cincinnati, \$650,000; Delaware Reservoir, \$900,000; Dillon Reservoir, \$1,277,600; Ironton, \$215,000; Massillon, \$1,860,000; Muskingum River Reservoirs, \$1,550,000; West Fork of Mill Creek Reservoir, \$1,041,700.

Rivers and Harbors—Cleveland Harbor, \$1,500,000.

OREGON

Flood Control—Cottage Grove Reservoir, \$140,000; Detroit Reservoir, \$9,500,000; Dorena Reservoir, \$2,500,000; Fern Ridge Reservoir, \$190,000; Lookout Point Reservoir, \$9,500,000; Milton Freewater, \$640,000; Willamette River, \$450,000.

Rivers and Harbors—Columbia River at Bonneville, \$1,250,000; Columbia and Lower Willamette Rivers below Vancouver, Wash., and Portland, Oregon, \$150,000; Coos Bay, \$850,000; Deppe Bay, \$400,000; McNary lock and dam, Columbia River, Oregon and Wash., \$35,000,000; Umpqua River, \$100,000; Yaquina Bay and Harbor, \$35,000.

PENNSYLVANIA

Flood Control—Conemaugh River Reservoir, \$7,400,000; East Branch Clarion River Reservoir, \$2,100,000; Punxsutawney, \$730,000; Sunbury, \$1,600,000; Wilkes-Barre-Hanover Township, \$340,000; Williamsport, \$1,700,000.

Rivers and Harbors—Monongahela River, locks 2, \$3,500,000; Schuylkill River, \$400,000.

RHODE ISLAND

Rivers and Harbors—Harbor of refuge at Point Judith and Point Judith Pond, \$160,000; Providence River and Harbor, \$190,000.

SOUTH DAKOTA

Flood Control—Fall River Basin, \$372,100; Fort Randall Reservoir, \$23,000,000; Oahe Reservoir, S. Dak. and N. Dak., \$2,000,000.

VERMONT

Flood Control—Union Village Reservoir, \$540,000.

WASHINGTON

Flood Control—Mill Creek, \$320,000; Mud Mountain Reservoir, \$400,000; Tacoma, \$500,000.

Rivers and Harbors—Chief Joseph Dam, Columbia River, \$5,000,000; Grays Harbor and Chehalis River, \$650,000.

WISCONSIN

Rivers and Harbors—Ashland Harbor, \$45,000; Port Wing Harbor, \$20,000.

hoped that the requirements of building research for weather data may be defined; and the climatologists, on their part, will explain how such data is obtained and what information is already available.

Francis W. Reichelderfer, Chief of the U. S. Weather Bureau, will participate in the conference. Dr. Reichelderfer has emphasized that while the Bureau is a source of extensive data on climatology, and is continually seeking to make this data more useful to industries, no definite statement of the needs of the building industry for climate information has ever come to the Bureau.

Doctors Paul Siple and Helmut Landsberg of the National Military Establishment will also be present to explain their recent work in the investigation of weather phenomena in areas smaller than those heretofore considered. Dr. Siple has studied regional climatology, and the characteristic climate profiles of many cities, while Dr. Landsberg has considered "microclimatology"—the effects of relatively minor geographical features, such as a hill or forest, on the climate of a small section.

After presentation of the weather and climate data, panel and open discussions will consider its significance and possibilities in building research. Three separate sessions will be devoted to climate and its effect on materials and structural elements, design and construction procedures, and mechanical engineering for human comfort. Outstanding building research scientists have been invited to join these discussions. Although prepared talks are planned, there will be ample time for comments and questions from the floor. There will also be exhibits of the new climate research results.

New Members Of Producer's Council

Ten companies which manufacture building materials and equipment have recently become members of the Producers' Council, national organization of building products manufacturers, James M. Ashley, Council president recently announced.

The new members and their official representatives in the Council are:

American Radiator & Standard Sanitary Corp., Pittsburgh, D. D. Couch, vice president; American Blower Corp., Detroit, H. E. Barth, vice president in charge of sales; C. F. Church Mfg. Co., Holyoke, Mass., Dudley Warth, vice president; Detroit Lubricator Co., Detroit, E. J. Doucet, vice president; Kewanee Boiler Corp., Kewanee, Ill., E. M. Palmer, vice president;

Minneapolis-Honeywell Regulator Co., Minneapolis, John Haines, vice president; Ross Heater & Mfg. Co., Buffalo, Charles H. Currier, president; Stenco Corporation, Rocky River, Ohio, Jesse E. Williams, president; Universal Corporation, Dallas, J. P. Travis, president; and Winco Ventilator Co., Inc., St. Louis, W. Kubatzky, secretary.

Local representatives of the new member companies are expected to be active in the Council's 30 chapters.

Weather and Building Theme of Conference

THE new Building Research Advisory Board, an agency of the National Research Council, has scheduled its first research correlation conference for January 11-12 in Washington. Entitled "Weather and the Building Industry," the conference will consider climatological research and its effect on building de-

sign, construction, materials and equipment.

Since the weather and climate influence all types of building design and construction, the subject chosen for the conference illustrates the aim of the Board to bring men from all fields of building research together with scientists of other fields, for the purpose of exchanging ideas and furthering cooperation in research. Through the conference it is

Southern Construction Projects

President Harry S. Truman signed legislation calling for \$30,000,000 start on a program of wind-tunnel construction for testing new weapons.

President Harry S. Truman signed a bill which provides \$150,000,000 a year in Federal aid to the States for hospital construction.

Congress allocated following amounts for flood control and river and harbor projects in following southern states: \$1,000,000 for Alabama, \$21,853,000 for Arkansas, \$10,825,000 for Florida, \$21,190,000 for Georgia, \$27,401,000 for Kentucky, \$8,450,000 for Louisiana, \$2,717,400 for Maryland, \$496,000 for Mississippi, \$3,539,000 for Missouri, \$14,552,500 for North Carolina, \$24,038,000 for Oklahoma, \$7,930,000 for South Carolina, \$7,230,000 for Tennessee, \$35,741,000 for Texas, \$3,928,600 for Virginia, \$7,865,000 for West Virginia and \$375,000 for District of Columbia.

ALABAMA

ALABAMA—Alabama Farmers Home Administration has been allotted \$1,250,000 for extending loans to farm owners for construction and repair of farm buildings.

ALABAMA—Corps of Engineers, Mobile, received low bid from Harrison-Wright Co., Tallahassee, Fla., \$69,596, for rehabilitating existing facilities at Lock No. 17, Black Warrior River.

ANNISTON—City Board of Education let contract to Jones and Hardy, Montevallo, \$732,594, for Junior High School.

ATHENS—Athens College and Limestone County plan plant to be leased to manufacturer of women's wear, \$100,000.

ATHENS—Limestone County Board of Revenue let contract to Brice Building Co., P. O. Box 1028, Birmingham, \$396,800 for Athens-Limestone Hospital.

ATHENS—Brittling Cafeteria Co., Inc., have plans in progress for restaurant, \$200,000.

BIRMINGHAM—J. Hamilton Perkins, 505 19th St., let contract to Foster & Creighton, for 121-unit apartment at Highland Ave., \$1,000,000.

BIRMINGHAM—Harris Transfer & Warehouse Co. let contract to Ralph A. Smallman & Co., 1109 5th Ave., S., for addition to warehouse, \$120,000.

BIRMINGHAM—City Board of Education received low bid for following school: Lee School, Jack A. Roberts, \$122,950.

BIRMINGHAM—City Board of Education let contract to Wilborn Construction Co., \$244,490, for alterations and additions to Uihman High School.

BIRMINGHAM—Ridout's Brown Service, Inc., 715 First National Bldg., have plans in progress for funeral home, 1800 S. 18th St., in Homewood, \$100,000.

BIRMINGHAM—Alabama Baptist Convention, c/o Dauphin Way Baptist Church, Mobile, plan 200-bed additions to Baptist Hospitals, \$2,500,000.

BIRMINGHAM—City Board of Education let contract to Jack A. Roberts, \$122,950, for additions to Lee School.

BIRMINGHAM—City let contract to Warren Brothers Road Co., First National Bldg., for paving Ensley Ave., \$95,589.

CAMDEN—Ouachita County plans 90-bed hospital, \$900,000.

CHILDERSBURG—Dr. Robert Stock received low bid from Lynn H. Blair, Alexander City, \$39,300 for Clinic.

GADSDEN—City Board of Education let contract to Butler and Cobbs, Montgomery, \$151,440, for school.

HARTSELLE—Joe Wheeler Elec. Membership Corp. let contract to Western Constr. Co., Inc., Jackson, Tenn., \$395,998, for 285.3 miles of line and 1,184 members.

JACKSON—Clarke-Washington Elec. Coop. Corp. let contract to Trans-Electric Co., 106 E. Broadway, Louisville, Ky., \$349,173, for 364.8 miles of line to serve 948 members, plus 12 miles of conversion line and 6 T. Key Co., 1212 S. Hull St., Montgomery, \$52,652, for 12.95 miles of 44 kv transmission line.

JASPER—Walker Theater Co., Birmingham, let contract to T. C. Brasfield, Birmingham, \$138,485, for theatre.

JEFFERSON COUNTY—Jefferson County Commissioners selected the following engineers for \$10,000,000 sewer project: J. V. Goodwin Engineering Co., Inc., 726 S. 29th St., Birmingham, Item 3, Ensley Sewage Treatment Plant, \$4,214,000; Item No. 5, Homewood Griffin Creek Outfall Sewer, \$325,000; Item 7, Outfall sewer for the city of Bessemer, \$108,000; Poligaze and Basemeng, Empire Bldg., Birmingham, Item 2, diversion tunnel, \$4,130,000; diversion tunnel sewage,

\$990,000; Item 4, Bessemer Sewage Treatment Plant, \$803,000; Item 6, Mountain Brook Relief Sewer, \$38,500.

JONESBORO—St. Bernard's Hospital to release plans for bids middle part of December for 4-story addition, \$600,000.

LISTERHILL—Reynolds Metals Co., Louisville, Ky., has launched an \$8,000,000 expansion program.

MOBILE—Mobile County Board of Education let contract to Stanley W. Newman, Inc., Merchants National Bank Bldg., \$54,293 for field house at Murphy High School.

MOBILE—State Docks Director, Henry W. Sweet, discussing \$4,000,000 warehouse terminal for motor carriers.

MOBILE—T. D. McCurley and Associates, Panama, Fla., will build 40-room hotel in Gulf State Park, Baldwin County, \$150,000.

MOBILE—Board of Roads & Revenue Commissioners let contract to Peyton-Higgison, \$157,000 for Mental Receiving & Diagnostic Unit City Hospital.

MONTGOMERY—State Highway Department let contracts for projects in following counties:

Wetumpka—Proj. No. S-449-B, 5.811 mi. grade and drain; Clyde O. Mitchell, Birmingham, \$128,301.

Butler and Lowndes—Proj. No. F1 292(2), 6.42 mi. grade and drain; Vandigriff, Montgomery, \$155,594.

Lamar—Proj. FAS 106(4), 4.271 mi. grade, drain & dbl. surf. treat.; Moss-Thornton Co., Leeds, \$316,661.

Franklin—Proj. FAS-435(1), 5.056 mi. grade and drain; Anderson-Gregory Co., Nashville, Tenn., \$73,092.

Etowah—Proj. S-675-A, 6.741 mi. grade and drain; Moss-Thornton Co., Leeds, \$73,253.

Marshall—Proj. No. FAS 427(1), 5.018 mi. grade, drain and dbl. surf. treat.; W. L. Cobb, Decatur, Ga., \$85,669.

Etowah—Proj. No. FAS-252(1) & SACP-218-A, 7.402 mi. base, SBST & pl. mix on road; J. B. Maynard, Alexandria City, \$68,081.

MONROEVILLE—Agricultural Center Board has tentative plans drawn for \$75,000 coliseum.

OZARK—Dale County Hospital Association having plans revised, will be out for bids soon, for \$600,000 hospital.

TSKKEE—Veterans Administration, Washington, D. C., let contract to Whaley Co., Inc., 6124 First Ave., Birmingham, \$208,500, for outside steam distribution system, Veterans Hospital.

WARREN—Bradley County received low bid from L. H. Knight Co., 112½ E. 7th St., Little Rock, \$244,954, for 44-bed County Hospital.

ARKANSAS

ARKANSAS—Corps of Engineers, Vicksburg, Miss., let contract to W. P. McGeorge, Jr., Box 995, Pine Bluff, \$266,591, for mattress remount construction Arkansas River.

ARKANSAS—Federal Housing Administration allotted \$1,286,300, for development of farm home construction.

ARKANSAS-TEXAS—Arkansas Louisiana Gas Co., Shreveport, let contracts for 163-mile, 20-inch gas pipe line, \$8,000,000; following are contractors: Section from Magnolia, Ark., to Malvern, Ark., including the multiple 14-inch Little Missouri River crossing let to Latex of Houston, Tex., Waskom to Magnolia let to Anderson Brothers, Houston, Tex.; Red River and Ouachita multiple 14-inch river crossings let to Omaha Dredge and Dock Co., Omaha, Neb.

BENTON—City applied issuance of \$60,000 bond issue for municipal swimming pool.

BLYTEVILLE—Housing Authority has approval for 300-unit low cost housing project, Chickasaw Co., \$2,000,000.

BLYTEVILLE—Board of Trustees plans school, \$450,000.

BRINKLEY—City, Community Hospital Committee, plan 50-bed general hospital, \$325,000.

CAMDEN—Hospital Board of Advisers approved preliminary plans for Ouachita County Hospital, \$900,000.

CORNING—Fort Smith Gas Co. applied for approval for gas distribution system, \$110,844.

DARDANELE—Arkansas Valley Feed Mills will rebuild structures, \$75,000.

EL DORADO—Warner-Brown Hospital plans 100-bed addition to existing hospital, \$130,000.

FAYETTEVILLE—Ozarks Rural Electric Coop. Corp. let contract to Southern Line Constr. Co., 818 Falls Bldg., P. O. Box 1838, Memphis, Tenn., \$224,806, for 198.37 mi. of line.

FAYETTEVILLE—University of Arkansas, Board of Trustees, has plans in progress for two fraternity and two sorority houses, \$125,000.

HOT SPRINGS—Army & Navy Hospital plans housing project on 300-acre site government hospital to provide homes for staff officers, \$852,000.

JEFFERSON AND LINCOLN COUNTIES—Corps of Engineers, Vicksburg, Miss., let contract to W. P. McGeorge, Jr., Box 995, Pine Bluff, \$266,591, for mattress remount and pile dike construction on Arkansas River.

JONESBORO—Board of Directors of Jonesboro Public Schools plans one-story 12-classroom buildings, \$150,000.

JONESBORO—Board of Directors of Jonesboro Public Schools plans elementary school, \$250,000.

LITTLE ROCK—State Highway Commission let contracts for projects in following counties:

Ashley—2.2 mi. grad., minor drain, struc. and grav. surf. Montrose overpass approaches, McGeorge Contracting Co., Pine Bluff, \$132,383.

Stone—11.51 mi. grad., minor drain, struc. and grav. surf. Hwy. 14, McGeorge Construction Co., \$186,287.

Newton and Boone—6.2 mi. grad., minor drain, struc., crushed stone and grav. surf., McGeorge Construction Co., \$171,099.

Randolph—1.3 mi. grad., minor drain, struc., conc. paving and remodeling of 1 grade, C. H. Atkinson Paving Co., Chillicothe, Mo., \$173,965.

Crittenden and Poinsett—9.9 mi. grad., minor drain, struc., 63, D. B. Hill Co., Little Rock, \$119,843.

LITTLE ROCK—State Highway Commission let contracts for projects in following counties:

Fulton—2 bridges on Hardy-Mammoth Spring Rd., E. E. Barber Construction Co., Fort Smith, \$89,761.

Fulton—2 bridges on Mammoth Spring-South Rd., E. E. Barber Construction Co., \$97,274.

Scott—9 bridges and 11 minor drainage struc. and approaches, Reynolds & Williams Construction Co., Tyler, Tex., \$111,749.

LITTLE ROCK—Arkansas-Louisiana Methodist, Rev. William L. Arnold, Pastor, broke ground for building, \$100,000.

LITTLE ROCK—Little Rock School Board approved \$500,000 bond issue for negro school improvements and new facilities for white schools.

LITTLE ROCK—State Welfare Commission has plans in progress for office building, \$613,000.

LITTLE ROCK—Arkansas State Game & Fish Commission has plans in progress for 4-story office building, \$460,000.

LITTLE ROCK—Public Buildings Administration, Washington, D. C., plans office building to house non-postal departments, \$5,000,000.

LITTLE ROCK—City, Elec. Dept., proposes sub-station in East End, \$62,646.

LITTLE ROCK—Little Rock School Board has preliminary plans in progress for physical educational building, \$304,000.

LITTLE ROCK—St. Vincent's Infirmary plans addition to existing infirmary building, \$5,289,750; 300 additional beds.

LITTLE ROCK—S. J. Beauchamp let contract to L. H. Knight, 112½ E. 7th St., \$325,000, for warehouse.

MAGNOLIA—Magnolia Ice & Coca Cola Bottling Co. let contract to Elmer D. Thomas, \$83,438, for bottling plant.

NEWPORT—Newport Independent School District has plans in progress for school, \$350,000.

NORTH LITTLE ROCK—Veterans Administration, Washington, D. C., plans addition to dining hall facilities, Fort Roots Veterans Hospital, \$300,000.

NORTH LITTLE ROCK—City, Electric Department, will build sub-station, \$62,000.

OZARK—Arkansas Valley Elec. Coop. Corp. let contract to L. O. Brayton & Co., P. O. Box 116, Dyersburg, Tenn., \$355,015, for 290.7 miles of line to serve 940 members.

PARAGOULD—Greene County Fair Association plans four permanent brick and concrete livestock buildings, \$300,000.

PARAGOULD—Paragould Civic Club has plans in progress for community center, \$250,000.

PIGGOTT—Piggott School Board plans elementary school, \$50,000.

PINE BLUFF—Pine Bluff Waterworks Co. seeking permission of Arkansas Public Service Commission for permission to sell \$28,000 in bonds for expansion of water system.

(Continued on page 16)

Southern Construction Projects

ARKANSAS

(Continued from page 15)

\$341,000.

FINE BLUFF—Board of Trustees let contracts for agriculture and science building at Arkansas Agricultural, Mechanical & Normal College for Negroes; agricultural building, Peterson, Garbi, Joseph Co., Little Rock, at \$148,450.

FINE BLUFF—Board of Trustees, Little Rock, plans student union building, \$200,000 and two dormitories, \$250,000 on campus of Arkansas Agricultural, Mechanical & Normal School.

RATCLIFF—Ratcliff School Board plans high school, \$100,000.

ROGERS—Board of Education has plans in progress for grade and high school, \$600,000.

DISTRICT OF COLUMBIA

WASHINGTON—Public Buildings Administration received low bid from R. L. Harmon Co., Silver Spring, Md., at \$130,440, Bid 1; and \$134,440, Bid 2, for remodeling Building II, Old Naval Hospital.

WASHINGTON—District Commissioners received low bid from Tuckman Barbee Construction Co., 1720 H St., N. W., \$242,000, for addition to Banneker Junior High School.

WASHINGTON—Public Buildings Administration received low bid from Lee T. Turner, 3616 14th, N. W., Washington, \$139,614 for alterations to Building 7, National Bureau of Standards.

WASHINGTON—Commissioner of Public Buildings, let contract to John McShain Construction Co., 17th & Spring Garden, Philadelphia, Pa., \$100,000, fixed fee, for restoration of White House, \$5,400,000.

WASHINGTON—Col. G. H. Whitesell, Assistant D. C. Engineer Commr., plans to spend about \$60,000,000 in capital outlay for its water system between now and 1970.

WASHINGTON—Beth Israel Congregation has plans completed for synagogue, 3408 C St., S. E., \$125,000.

WASHINGTON—Board of Education plans addition to Beers Elementary School, \$433,220.

WASHINGTON—Sequitennial commission will break ground soon for Sequitennial Amphitheater, Rock Creek Park; William M. Hausmann, Archt.; National Park Service has allocation of \$300,000 for project.

WASHINGTON—Corps of Engineers let contract to Lee T. Turner, 3616 14th, N. W., \$87,877 for alterations to neuropsychiatric ward, Walter Reed General Hospital.

FLORIDA

State Road Department, Tallahassee, received low bid from Walner Construction Co., Valdosta, Ga., \$279,755, for main bridge and two relief spans and approaches over Withlacoochee River on State Rd. 6.

State Road Department, Tallahassee, received low bid from Espy Paving & Construction Co., Savannah, Ga., \$325,193, for steel and concrete bridge with electrically operated double-leaf bascule over Inter-Coastal Waterway on Rd. 11.

ATLANTIC BEACH—City Council approved \$150,000 bond issue for waterworks improvements.

CORAL GABLES—R. N. Ash, Miami, will build hotel, \$100,000.

DADE COUNTY—Rice & Sons, Inc., 598 N. W. 98th St., Miami, will build 8 residences, \$75,448.

DADE COUNTY—Florence S. Markowitz has plans in progress for 12 apartment bldgs., \$420,000.

DADE COUNTY—W. B. Sawyer, 206 N. W. 7th St., Miami, let contract to Atlantic Construction Co., 3128 Coral Way, Miami, for 10 apartment bldgs., \$330,000.

DADE COUNTY—Fad Construction Corp., has plans in progress for 28 residences, \$148,184.

DADE COUNTY—Florida Sun Deck Homes Co., Hialeah, will build 23 residences, \$124,550.

DADE COUNTY—Harry Markowitz, 1220 Washington Ave., Miami Beach, will build 12 apartment buildings, \$437,760.

DAYTONA BEACH—Volusia County Commissioners let contract to Security Construction Co., 238 N. Coates St., \$75,777 for addition to Courthouse.

DELAND—Volusia's Board of County Commissioners, let contract to T. A. Loving & Co., Goldsboro, N. C., \$1,178,991, for Halifax River bridges, Daytona Beach and Port Orange.

FORT LAUDERDALE—W. H. Thorp, let contract to Thomas M. Zink & Co., 1617 N. E. 2nd Ct., for two-story apartment bldg., 741 Bayshore Dr., \$90,000.

FORT LAUDERDALE—Victor Nurmi, Nurmi Isles, let contract to Powell Brothers, Inc., 14 S. W. 1st Ave., \$50,000, for seawall.

FORT LAUDERDALE—G. H. Glover, 2841 N. Ocean Blvd., will build apartment, \$80,000.

FORT LAUDERDALE—Albert Rickel, R.F.D. #2, will build 12 residences, \$91,000.

FORT LAUDERDALE—G. H. Glover, has plans in progress for apartment, 2841 N. Ocean Blvd., \$75,000.

GOLDEN BEACH—Heathwood Co., received low bid from John M. Ritter, 10880 N. E. 2nd Pl., Miami Shores, \$99,700, for alterations to residence and new apartment at Collins Ave.

GREEN COVE SPRINGS—Navy Department received low bid from Bury Compressor Co., Erie, Pa., at \$112,567, on Item 1, for air compressors.

HIALEAH—S. F. Daniels, 944 E. 25th St., will build 69 residences, \$220,800.

JACKSONVILLE BEACH—City let contract to Ivy H. Smith Co., 1525 San Mario Blvd., Jacksonville, \$219,517, for sanitary sewerage.

MIAMI—Board of Dade County Commissioners have plans completed for Dade County Auditorium, \$750,000.

MIAMI—Westminster Presbyterian Church, let contract to H. O. Biggers, 3471 S. W. 8th St., for addition, cost \$58,000.

MIAMI—C. L. Lanier received low bid from Sparks Constr. Co., 4569 Ponce de Leon Blvd., Coral Gables, \$59,980, for residence.

MIAMI—Coral Gate Properties, Inc., let contract to A. J. Paul, 2235 S. W. 23rd Ave., for 69 residences, \$134,000.

MIAMI—Highland Park Baptist Church will build addition, \$150,000.

MIAMI—First Unitarian Church will build church, \$70,000.

MIAMI—City Commission, let contract to Chalker Construction Co., 343 S. W. North River Drive, for colored police precinct station, 470 N. W. 11th St., \$61,882.

MIAMI—South Tropical Curb Market, 2525 S. W. 8th St., has plans in progress for 2 apartment bldgs, \$50,000.

MIAMI—C. L. Lanier let contract to Sparks Construction Co., 4569 Ponce de Leon Blvd., Coral Gables, for residence, \$50,000.

MIAMI—Roper Corp. let contract to City Construction Corp., 150 N. W. 73rd St., for store and office bldg., \$335,000.

MIAMI—Ro-Ed Corp. will build store, 3600 N. W. 25th Ave., \$63,800.

MIAMI—Dade County announced plans for \$2,000,000 aquarium on Virginia Key.

MIAMI—R. W. Ingalls, Jr., received low bid from Thompson-Pollizzi Construction Co., 300 Granello Ave., \$64,500, for store and office.

MIAMI—R. W. Ingalls, Jr., let contract to Thompson-Pollizzi Construction Co., 300 Granello Ave., Coral Gables, for store and office, \$70,100.

MIAMI BEACH—Cromwell Hotel let contract to Miami Station, Inc., 1118 N. E. 2nd Ave., Miami, for air conditioning, \$55,000.

MIAMI BEACH—Sans Souci Hotel, let contract to Hill York Corp., 1221 S. W. 8th St., Miami, for air conditioning and refrigeration, \$185,000.

MIAMI BEACH—Marshall Apartments, Inc., Carol-Jean Apartments, & Paul Apartments, Inc., let contract to Giller Contracting Co., Inc., 523 Michigan Ave., for 3 apartments, \$288,000.

MIAMI BEACH—6790 Indian Creek Drive Corp. let contract to North Atlantic Contractors, Inc., 311 S. W. 10th Ave., Miami, for apartment, \$64,000.

NAPLES—Collier County Board of Public Instruction, let contracts for following schools: Junior-senior high school for whites, Bradford Brothers, Inc., 1101 Lincoln Road Bldg., Miami Beach, \$210,371; school for negroes, McSwain and Campbell, Naples, \$38,276.

NORTH MIAMI—Roval Palm Homes let contract to Fleeman Builders, 721 N. W. 21st Ct., Miami, for 17 residences, \$120,763.

NORTH MIAMI—Harvey Construction Co., 14085 W. Dixie Hwy., will build 56 residences, \$179,808.

NORTH MIAMI—Shoan & Nelson, 70 N. E. 92nd St., Miami, will build 6 residences, \$62,526.

OCALA—City let contract to F. H. McGraw & Co., 51 E. 42nd St., New York 17, N. Y., \$673,205 for water treatment plant and sewage disposal plant.

ORLANDO—First Baptist Church, received low bid from Stevens & Sipple, \$164,970, for

educational bldg.

PANAMA CITY—Public Buildings Administration let contract to George C. Parker, Ozark, Ala., \$74,300 for miscellaneous repairs and painting, Jones-Wainwright Shipyard.

PENSACOLA—Escambia County Board of Public Instruction, has preliminary plans for High School, \$750,000.

PENSACOLA—First Methodist Church has plans in progress for educational building, \$125,000.

PENSACOLA—Housing Authority, has approval for 500-unit low rent public housing project, \$100,000.

PENSACOLA—Baptist Memorial Hospital plans for \$1,200,000 building.

PLANT CITY—Grant Packing Corp. started frozen citrus concentrate plant, \$750,000.

PORT ST. JOE—Corps of Engineers, approved \$1,125,000 channel deepening project.

ST. PETERSBURG—Masonic order plans home, \$2,000,000.

SANTA ROSA—Santa Rosa Island Authority has \$1,220,000 loan, approved by Reconstruction Finance Corp., for development of Santa Rosa Island.

TALLAHASSEE—City has selected Reynolds, Smith and Hillis, Jacksonville, as Engineers for electric generating plant on St. Mark's River, \$5,000,000.

TALLAHASSEE—Guy C. Fulton, Gainesville, Archt., for two dormitories at Florida State University, \$2,500,000.

TALLAHASSEE—State has approval for expenditure of \$40,000,000 in local and federal funds, for hospital construction over a five-year period.

TALLAHASSEE—State Road Department received low bids for projects in following counties:

Walton—22 mi. paving on Rd. 10; Hardaway Contracting Co., Columbus, Ga., \$214,472.

Suwannee—Paving 11½ mi. of Rd. 10; Jaxon Construction Co., Jacksonville, \$345,974.

Lake—Paving 9½ mi. of Rd. 25; Polk Construction Co., Lakeland, \$486,727.

Polk—Paving 9.363 mi. of Rd. 25; W. L. Cobb Construction Co., Tampa, \$348,087.

Lake—Paving 7½ mi. of road, widening 1 bridge and another on Rd. 25; H. E. Wolfe Contracting Co., St. Augustine, \$377,541.

Putnam and St. Johns—Paving 3.618 mi. on Rd. 206 and 1 bridge southwestward from Hastings; Brinson Construction Co., Tampa, \$114,050.

Taylor and Lafayette—Paving 8 mi. of highway and 1 bridge on Rd. 20; James H. Craggs Construction Co., Ocala, \$479,956.

Martin—Widening and reworking 10 mi. of Rd. 15 and 5 bridges between Chancy Bay and Martin-Palm Beach County line; John A. Benton, St. Petersburg, \$188,642.

Lake and Marion—Paving 181.2 mi. of Rd. 19; Caddell & Jackson, Jacksonville, \$99,459.

Hamilton—Clearing, grad. and surf. 3.836 mi. of Rd. 143; J. M. Wilson, Grimsby, \$77,818.

Marion—Grad. constr. and surf. 18.488 mi. of Rd. 314; W. L. Cobb Construction Co., Tampa, \$288,563.

Madison—Clearing, grad. surf. 17.649 mi. of roads and 2 bridges on Rds. 475 and 480; Caddell & Jackson, Jacksonville, \$290,454.

Columbia—Reworking, widening resp. 9 mi. of Rd. 10; J. D. Manly Construction Co., Leesburg, \$82,254.

Broward and Dade—Reworking and surf. 17.778 mi. on Rd. 7 and 8. 765 mi. southward from Rd. 85; Broward Asphalt Corp., Fort Lauderdale, \$113,974.

Walton—Surfing 9 mi. on Rd. 30; Georgia-Alabama Paving Co., Columbus, Ga., \$41,804.

Osceola—Surfacing 13 mi. of Rd. 500; Belcher Oil Co., Miami, \$87,977.

Palm Beach—Surfacing 121.2 mi. on Rd. 25; Asphalt Paving Co., Coral Gables, \$165,913.

Monroe—53 supplemental steel and concrete pile vents on bridges over Tea Table Key Channel and Lignum Vitae Channel on Rd. 5; Powell Brothers, Inc., Fort Lauderdale, \$103,445.

Alachua and Union—1 bridge over Santa Fe River and paving approaches on Rd. 241; John A. Benton, St. Petersburg, \$123,966.

Hardee—State Proj., Job No. 0660-901, Rd. No. 61; Lakeland Cement Co., Lakeland, \$1,000,000.

TAMPA—Housing Authority has approval for 1,500 low-cost public housing units, \$5,000,000.

TAMPA—St. John's Episcopal Church plans auditorium and educational bldg., \$70,000.

TAMPA—Paul Smith Construction Co. will build 550-unit housing project at MacDill Air Force Base, \$5,000,000.

TAMPA — Burroughs Adding Machine Co. let contract to Paul Smith Construction Co., 310 N. Rome Ave., for office, \$125,000.

TAMPA — Hillsborough County Board of Public Instruction received low bid from C & R Construction Co., P. O. Box 1001, Tallahassee, \$218,770, for junior high school.

WEST PALM BEACH — Board of Palm Beach County Commissioners received base bid of \$478,777 from Arnold Construction Co., 7 Murray Bldg., Palm Beach, for County Jail.

WINTER GARDEN — Board of Public Instruction has preliminary plans in progress for addition to Winter Garden School, \$166,000.

WINTER HAVEN — Polk County Board of Public Instruction let contract to A & M Construction Co., Bartow, \$407,000, for elementary school.

GEORGIA

GEORGIA — Farmers Home Administration allotted \$1,270,000 for farm home construction.

ALBANY — Radium Springs Inn let contract to A. C. Samford, Inc., \$89,085 for Radium Springs Inn.

ALMA — Bacon County Board of Education received low bid from John V. Smith Co., Hazlehurst, \$98,000 for high school.

ATLANTA — Equipment Sales Company received low bid from Hall Construction Co., 664 Spring St., N. W., \$65,231 for office, shop and warehouse.

ATLANTA — Fulton County Board of Education let contract to Hettrick Engineering Co., 666 Greenwood Ave., N. E., \$109,663, for North Fulton High School.

ATLANTA — Wainer Construction Co., Valdosta, was low bidder at \$343,091, for Glenn St. viaduct project.

ATLANTA — North Avenue Presbyterian Church let contract to Wey-Leonard Construction Co., 200 Alexander St., N. W., \$70,820, for church alterations.

ATLANTA — State Highway Department received low bids for projects in following counties:

Group — Fed. Aid Proj. No. F-147(5), 13.593 mi. widening shoulders and drain. extensions, J. Frank Rushin Contracting Co., Inc., Columbus, \$196,059.

Dougherty and Lee — Fed. Aid Sec. Proj. No. S-052(31), 3.654 mi. grad., base and surf. treat., Oxford Construction Co., Albany, \$37,315.

Fulton — Fed. Aid Proj. No. U-536(2-2), 3.606 mi. grad., paving, 5 grade separation underpasses and 1 bridge on Atlanta North-South Expressway; E. Jack Smith, Hurt Bldg., Atlanta, \$1,088,734.

Fulton — Fed. Aid Proj. No. U-536(2-3), 1.617 mi. grad. and pav., also 2 bridges on Atlanta Expressway, including Williams St. connection; MacDougall Construction Co., Northside Dr., N. W., \$1,497,963.

Irwin — Fed. Aid Sec. Proj. No. S-054(0-1), 4.943 mi. grad., base and surf. treat., also bridge at Big Creek, T. D. Lamb, Jr., Vidalia, \$75,702.

Haralson — Fed. Aid Sec. Proj. No. S-069(2-1), 6.416 mi. grad., base and surf. treat., R. T. Smith, 215 Church, Atlanta, \$136,915.

Burke — Fed. Aid Sec. Proj. No. S-089(6-1), 5.314 mi. grad., base and surf. treat., T. D. Lamb, Jr., Vidalia, \$37,179.

Oglethorpe — Fed. Aid Sec. Proj. No. S-089(9-1), 6.466 mi. grad., base and surf. treat., J. E. Jordan Construction Co., Marietta, \$127,300.

Barrow and Jackson — Fed. Aid Sec. Proj. No. S-091(0-1), 3.340 mi. grad., base and surf. treat., also 1 bridge, M. F. Woodall Co., Inc., 1594 Lakewood Ave., S. E., Atlanta, \$98,819.

Baldwin — State Aid Proj. No. PR-1013(2), 6.546 mi. grad., base and surf. treat., also 1 bridge, Jefferson Contracting Co., Wadley, \$95,938.

Elbert — State Aid Proj. No. PR-1055(1), 6.304 mi. base and surf. treat., W. L. Cobb Construction Co., Decatur, \$37,271.

Calhoun — Fed. Aid Sec. Proj. No. S-1188(1), 2.421 mi. grad., base and surf. treat., Leo T. Barber, Moultrie, \$40,000.

Warren and McDuffie — Fed. Aid Sec. Proj. No. S-1449(1), 7.607 mi. grad., base and surf. treat., W. T. Anderson, Inc., Thomson, \$184,561.

Crawford and Taylor — Fed. Aid Sec. Proj. No. S-1512(1), 2.475 mi. grad. and surf., E. M. Beckman Construction Co., Perry, \$110,117.

Jefferson — Fed. Aid Proj. No. F-044(1-1), new bridge at Rocky Comfort Creek and 0.720 mi. widening and resurf. approaches, State Construction Co., Austell, \$114,956.

Gordon — Fed. Aid Proj. No. F-065(1-1), new bridge at Oothcaloga Creek, State Construction Co., Austell, \$45,000.

Clinch and Echols — Fed. Aid Proj. No. F-088(1-2), bridge at Suwanoochee Creek, H. M. Pafford, Jr., Waycross, \$90,146.

Habersham — Fed. Aid Sec. Proj. No. S-1349(1), bridge at Soque River and 0.866 mi. graded approaches, A. G. Wimpy, Dahlonega, \$85,697.

ATLANTA — Fulton County Board of Education received low bid from Henry A. Ivey, Inc., 569 Plum St., N. W., \$593,040 and A. Farnell Blair Co., Inc., 136 Spring St., N. W., alternate bid, \$570,340 for Westside High and Elementary School.

ATLANTA — City received low bid from Standard Construction Co., Columbus, \$1,222,300 for incinerator plant addition.

AUGUSTA — Reynolds Market Corp. received low bid from Clausen & Webster, 1394 Winnett St., \$159,630 for office and warehouse, for elementary school.

CARTERSVILLE — Corps of Engineers, Mobile, Ala., received low bid from Montgomery Construction Co., Montgomery, Ala., \$197,897, for superstructure and roadway for Allatoona Creek crossing, Bartow County.

COLLEGE PARK — Fulton County Board of Education let contract to Flagler Co., 305 Techwood Drive, N. W., Atlanta, \$156,467, for elementary school.

COLUMBUS — St. Paul Methodist Church plans building in Wildwood, \$300,000.

COLUMBUS — Central Baptist Church, Phenix City, plans sanctuary and educational bldg., \$111,000.

COLUMBUS — Lummus Gin Co., 9th Ave. and 8th St., let contract to Murphy Pound Construction Co., Hill Bldg., for shop addition, \$85,000.

DECATUR — First Baptist Church received low bid from Henry C. Beck Co., \$176,329, for church.

DECATUR — DeKalb County approved \$1,925,000 bond issue for school improvements.

DECATUR — DeKalb County sold \$1,250,000 bond issue to John Nuveen & Co., for sewer improvements.

FAIRBURN — Fulton County Board of Education, Atlanta, let contract to Maynard Johnston & Co., 2106 Belvedere Drive, N. W., Atlanta, \$188,710 for Fairburn Elementary School.

FORT OGLETHORPE — Tri-County Hospital Authority revising plans for 90-bed hospital, \$1,020,000.

HARTWELL — Texton Southern, Inc., has completed plans for a \$1,000,000 expansion to its present \$5,000,000 Hartwell plant; Daniel Construction Co., 429 N. Main, Greenville, S. C., contr.

JEFFERSON — Jackson Electric Membership Corp. let contract to Alrich Electric Construction Co., Augusta, \$189,892, for 220.0 miles electric distribution system.

MARIETTA — Housing Authority has approval for low-rent housing project, \$875,000.

MARIETTA — Corps of Engineers, Mobile, Ala., received low bid from Elard Contracting Co., Box 6705, Birmingham, Ala., \$266,694, for sub-impounding dam across Proctor Creek.

MONROE — First Baptist Church let contract to A. S. Edwards, \$59,483, for educational bldg.

ROME — City Board of Education received low bid from Benson and Johnson Construction Co., P. O. Box 61, Rome, \$272 for gymnasium for Darlington School.

SAVANNAH — Housing Authority has been allotted \$2,000,000 for low-rent public housing program, \$5,500,000.

SAVANNAH — Chatham County Board of Education has selected Oscar M. Hansen, as Archt. for proposed \$200,000 white elementary school in Woodstock Subdivision.

THOMASVILLE — Board of Education received low bid from Bowen-Baggett Co., Quincy, Fla., \$209,450 for two gymnasiums.

KENTUCKY

BOWLING GREEN — Warren County Rural Electric Co-operative, has approval for 580 miles of lines in Barren, Butler, Edmonson, Grayson, Logan, Ohio, Simpson and Warren counties, \$675,000.

FRANKFORT — Department of Highways let contracts for projects in following counties:

Nelson — Bardstown-Springfield Rd., 5 mi. grad., drain and traf. bnd. surf.; W. C. Snider, Danville, \$254,835.

Lyons — Kuttawa-Princeton Rd., 3.8 mi. grad., drain and traf. bnd. surf.; L. G. Arnold, Inc., Eau Claire, Wis., \$77,075.

Whitley — Meadow Creek Rd., 7.8 mi. reconstr. & traf. bnd. surf.; B. R. Campbell & Son, Corbin, \$95,440.

Graves — Dublin-Ky. 58 Rd., 4.5 mi. reconstr. & traf. bnd. surf.; J. D. Boyer Construction Co., Harrisburg, Ill., \$103,059.

Knott — Cave Creek Rd., 1.5 mi. reconstr. & traf. bnd. surf.; R. R. Dawson Bridge Co., Bloomfield, \$62,170.

Lawrence — Cooksey Creek Rd., 5 mi. reconstr. & traf. bnd. surf.; Winston Ford Co., Prestonsburg, \$71,538.

Martin — Beau-Louis Rd., 5.4 mi. reconstr. & traf. bnd. surf.; Eastern Construction Co., Richmond, Va., \$93,187.

Muhlenberg — G r a h a m Rd., Yearlings Chapel-Vernal Grove Rd. and Clarks Mill Rd., 6 mi. reconstr. & traf. bnd. surf.; O. L. Depp, Owensboro, \$13,762.

Whitley — Clio-Sanders Creek Rd., 9.8 mi.

reconstr. & traf. bnd. surf.; George H. Cheek Construction Co., Frankfort, \$94,817.

FRANKFORT — Department of Highways received low bids for projects in following counties:

Boyd — Proj. No. F1 8(5), SP 10-165, Ashland-Grayson Rd., 1.351 mi. grad., drain and traf. bnd. surf.; E. B. Lowman, Ashland, \$206,873.

Todd — Proj. No. SP 110-286, 4.066 mi. grad., drain and traf. bnd. surf., on Elkton-Allegre-Kirkmansville Rd.; R. B. Tyler Co., Louisville, \$35,620.

Metcalf — Proj. No. RS 85-204, 5.091 mi. reconstr. & traf. bnd. surf. on Mell Ridge Rd.; Henderson Hite Construction Co., Bardstow, \$49,844.

LONDON — London-Laurel County Development Association, approved issuance of \$35,000 bond issue for Laurel County Airport, \$240,000.

LOUISVILLE — City Board of Education sold \$4,000,000 bond issue to Chase National Bank, New York, for school improvements.

LOUISVILLE — Jefferson County Fiscal Court has plans in progress for remodeling Courthouse, Fiscal Court Building, Armory, and Kirwan Bldg., \$60,000.

NICHOLASVILLE — Jessamine County defeated \$300,000 bond issue for Hospital.

OVENSBORO — Municipal Housing Commission, has applied for approval for apartment project, \$1,096,694.

RUSSELL COUNTY — Corps of Engineers, Nashville, Tenn., let contract to Cecil Brecht & Co., 2825 W. 26th St., Chicago, Ill., \$5,558,719, for completion of Wolf Creek Power Plant, Cumberland River.

LOUISIANA

LOUISIANA — St. Tammany Parish School Board, Covington, let contracts for following schools: Dye and Mullings, Inc., P. O. Box 485, Columbia, Miss., for gymnasium and auditorium for Madisonville School, \$46,449; and alterations and additions to Pearl River School at \$51,437.

LOUISIANA — Beauregard Parish School Board, Delcider, let contract to Cecil Chaud, 2828 Elliott St., Alexandria, \$82,428, for gymnasium-auditorium building and repairs to existing school at Ragley, and gymnasium-auditorium at Dry Creek.

NATCHITOCHES — Parish School Board let contracts for following schools: new classroom building and auditorium-gymnasium, Clouterville High School, Clouterville, La., City Lumber Co., P. O. Box 89, Alexandria, \$148,995; auditorium-gymnasium school in Kisatchie, La., P & M Construction Co., Ringgold, \$31,870.

ALEXANDRIA — Charles T. Roberts, Archt., has plans and specifications for \$200,000 school building program.

ALEXANDRIA — Corps of Engineers, New Orleans, let contract to Blanks Construction Co., P. O. Box 37, Vidalia, \$258,874, for 1,540,000 cu. ft. semi-compact earthwork on Red River Levees, Rapides Parish.

ALEXANDRIA — City plans fire station, \$100,000.

ALEXANDRIA — City approved \$2,400,000 bond issue, for constructing drains and drainage canals.

BATON ROUGE — City let contract to R. P. Farnsworth & Co., P. O. Box 850, New Orleans, \$182,898 for administration building at Harding Field.

BATON ROUGE — L. A. Lard, Sr., received low bid from L. W. Eaton Co., Inc., Box 387 at \$72,424 for building.

BATON ROUGE — East Baton Rouge Parish School Board, let contract to Buquet and LeBlanc, Raymond, Bldg., \$264,638, for Brookstown Elementary School.

BATON ROUGE — East Baton Rouge Parish School Board let contract to R. P. Farnsworth & Co., Inc., 1515 S. Salcedo St., New Orleans, \$226,363, for Chaneyville Junior High School; Barksdale and LeBlanc, P. O. Box 1567, Baton Rouge, \$169,500 for central auditorium-gymnasium, lunchroom building.

BATON ROUGE — Louisiana State University let contract to Robert Thibodeaux, P. O. Box 887, \$86,000 for new University Presbyterian Student Center building on Dalrymple Drive.

BATON ROUGE — City received low bid from A. A. Stevens, 2320 Iroquois St., \$58,771, for Evangeline Street fire station.

BENTON — Corps of Engineers, New Orleans, received low bid from The Fordice Construction Co., Memphis, Tenn., \$75,820, for 18 rock groins on left descending bank of Red River, Bossier Parish.

BOGALUSA — Bogalusa School Board let contract to Bartley and Binnings, 433 Gravier St., New Orleans, \$135,559, for Long Avenue Elementary School.

COLFAX — Grant Parish School Board sold \$145,000 bond issue to Schaff & Jones, New Orleans, for school improvements.

CROWLEY — Acadia Parish Police Jury

(Continued on page 18)

Southern Construction Projects

LOUISIANA

(Continued from page 17)

has final plans in progress for Courthouse, \$1,000,000.

BATON ROUGE—United Gas Pipeline Co., has applied for approval of constructing 90-mile natural gas pipeline, \$15,000,000.

BATON ROUGE—City sold \$750,000 bond issue for public improvements to Northern Trust Company, Chicago, Ill.

BATON ROUGE—Department of Highways, let contracts for projects in following parishes:

Acadia—Surf, 5 mi. of Church Point-Prudhomme Hwy.; W. H. Patterson & Co., \$106,812.

Avoyelles—Surf, 1 mi. of Evergreen-Goudeau Hwy.; Carruth Contracting Co., \$714,268.

Washington—Surf, 2 mi. of Kentwood-Mount Hermon Hwy.; Walter J. Elsworth, \$49,067.

BATON ROUGE—Department of Highways, let contract for project in following parish:

Franklin—State Proj. No. 821-23-01, Bayou Macon bridge, steel and concrete bridge; W. R. Fairchild, Hattiesburg, \$91,362.

BATON ROUGE—Department of Highways, received low bids for projects in following parishes:

St. Tammany—State Proj. No. 281-03-02, 8.376 mi. shaping roadway, drain, struc., repairs to trestle bridges, aggre. type or soil cement base course and 2-application bitum. surf. treat.; W. Kleinpeter, 4047 Hatcher Ave., Baton Rouge, \$159,098.

St. Bernard—State Proj. No. 284-01-06, 7.2 mi. shaping shoulders shell base course and bitum. surf. treat.; T. W. Kleinpeter, 4047 Hatcher Ave., Baton Rouge, \$159,098.

BATON ROUGE—Department of Highways, received low bids for projects in following parishes:

East Baton Rouge—State Proj. No. 255-02-05, 7.493 mi. grad., drain., struc., I-beam span girders, aggre. base course and bitum. surf. treat.; T. L. James & Co., Inc., Ruston, \$309,223.

Orleans—State Proj. No. 293-07-04, New Basin canal fill for Pontchartrain Expressway, 1.944 mi.; Jachnecke Service, Inc., 814 Howard Ave., New Orleans, \$1,375,851.

Union—State Proj. No. 311-01-03, Bernice-Camp Creek School Hwy., 1.370 mi. grad., small drain, struc., 1 10% 19' and 1 32% 19' span crescented timber trestle and grav. surf.; T. L. James & Co., Inc., Ruston, \$141,516.

Iberia—State Proj. No. 823-02-03 and 237-01-06, 2.038 mi. grad., drain, struc., and Portland cement conc. pavt.; Forcum-James Co., Box 911, Baton Rouge, \$136,860.

BATON ROUGE—Department of Highways, received low bids for projects in following parishes:

Evangeline—State Proj. No. 203-02-04, 8.673 mi. grad., small drain, struc., 7 1/2' 20' ft. conc. slab bridge, T. L. James & Co., Inc., Ruston, \$265,183.

Lafayette—Proj. No. 216-03-06 and S-115(1) 3.929 mi. grad., drain, struc. and Portland cement conc. pavt.; Burke & Kingston, Inc., \$237,866.

Evangeline—Proj. No. 372-01-04, 4.374 mi. small drain, struc., grav. base course soil cement base course and 3-application bitum. surf. treat. (asph. cement); W. H. Patterson & Co., \$178,415.

East Baton Rouge—Proj. No. 250-01-05 and S-60(1), 8.118 mi. grad., rein. conc. deck girder bridges, drain, struc. and Portland cement conc. pavt.; T. L. James & Co., Inc., Ruston, \$584,182.

CROWLEY—Mayor and Board of Aldermen let contract to Barber Brothers Contracting Co., P. O. Box 629, Baton Rouge, \$184,930, for improvements to streets involving 104,000 sq. yds. of soil cement base and 6,200 tons asphaltic conc. wearing surf.

CROWLEY—State Board of Education received low bid from Romero and Theall, Youngsville, \$108,000 for addition to Southwestern Louisiana Trade School.

DENHAM SPRINGS—City let contract to Carruth Contracting Co., Baton Rouge, \$101,000, for natural gas transmission line and distribution system.

DENHAM SPRINGS—City let contract to Red River Construction Co., Shreveport, \$223,000 for sewage collection system and sewage treatment plant.

DENTREHAN—William R. Burk, Associated Architects-Engineers, New Orleans, let contract to Union Construction Co., Inc., 2634 Almonster Ave., New Orleans, \$52,395 for convent building for St. Charles Roman Catholic Church.

FERRIDAY—Board of Trustees has plans in progress for high school, \$200,000.

GEORGETOWN—Grant Parish School Board sold \$106,000 bond issue to Schaff & Jones, New Orleans for school improvements.

GUEYDAN—City approved \$225,000 bond issue for sewerage system and natural gas system.

HAMMOND—First Presbyterian Church has plans in progress for church, \$75,000.

JENNINGS—Jefferson Parish School Board plans new \$300,000 high school.

LAFAYETTE—City sold \$1,062,000 various purpose bonds to John Nuveen & Co. and Schaff & Jones, Inc.

LAFAYETTE—Lionel Jeanmard let contract to Joe Gossen, Jr., for 20-unit tourist court, \$100,000.

LAFAYETTE—City let contracts to A. M. Lockett Co., New Orleans, \$319,000, for (turbogenerators); to Elliot Rice, \$100,000, for surf. condensers & auxiliaries; to Springfield Boiler Co., Springfield, Ill., at \$269,040, for boilers and auxiliaries; to General Elec. Co., at \$77,046, for volt main, boilers & auxiliaries; to Allis Chalmers, at \$182,796, for transformer sub-station.

LAFAYETTE—Lafayette Parish Police Jury plans erection of auditorium as a memorial; \$350,000 available; bond issue for \$380,000 voted.

LAKE CHARLES—Calcasieu Parish School Board sold \$200,000 bond issue to Volz, Caswell Co., San Antonio, Texas, for school district No. 21.

LAKE CHARLES—Calcasieu Parish School Board let contract to T. Miller & Sons, P. O. Box 921, \$146,520 for auditorium and cafeteria, Public School building, School District No. 22.

MANY—Mayor and Board of Aldermen let contracts as follows: Clement Bepouey, Jr. & Co., 1432 Canal Bldg., New Orleans, sewer extensions, water extensions, \$50,000; Mitchell, Bossier Bank & Trust Bldg., Shreveport, \$37,397; water well, Eunice Iron Works, Inc., Eunice; swimming pool and bath house, Paddock Engineering Co., 3727 Atwell St., Dallas, Texas, \$40,800.

MARRERO—Board of Commissioners of Ames Municipal Drainage District of Jefferson Parish let contract to C. B. Spencer, 2350 Rousseau St., New Orleans, \$84,658, for new one-story steel frame and metal siding Pumping Station Building and equipment for pumping plant, District No. 1.

MOBGAS CITY—City has plans in progress for sewer improvement and extensions, \$325,000.

MORGAN CITY—City will call for bids soon for natural gas distribution system, \$460,000.

NATCHITOCHES—Natchitoches Parish School Board sold \$253,000 bond issue to Equitable Securities Corporation of New Orleans for four schools.

NEW ORLEANS—Mayor and Board of Trustees let contract to James R. Evans, P. O. Box 806, Bogalusa, \$57,365, for approximately 19,665 sq. yds. of conc. sidewalks.

NEW ORLEANS—Union Passenger Terminal Committee let contract to Keller Construction Corp., 7900 Palm St., \$171,545, for temporary platforms, canopies, paving, steam, air, gas, water, drainage and electrical facilities.

NEW ORLEANS—Board of Education let contract to D. C. Pittman Construction Co., 3025 49th St., Metairie Road, \$136,000 for school and gymnasium at Golden Meadow High School.

NEW ORLEANS—Robert S. Maestri plans 3-story, 400-car garage to be leased to Blaise Parking Service Co., \$400,000.

NEW ORLEANS—Corps of Engineers let contract to Sam Carlin, Inc., Berwick, \$179,775, for sinking 2550 squares of frame willow mattress revetment on Mississippi River, vicinity of Esplanade.

NEW ORLEANS—American Legion Housing Corp. has plans in progress for 400 residences, \$4,000,000.

NEW ORLEANS—Board of Education let contract to A & O Builders, 3207 1/2 Metairie Road, \$265,980 for auditorium and gymnasium at Larose-Cut Off High School.

NEW ORLEANS—National Hotel Co., Galveston, Texas, has plans completed for 400-room addition to Jung Hotel, \$3,500,000.

NEW ORLEANS—Hotel Monteleone received low bid from American Heating & Plumbing Co., 2929 Maronne St., \$88,573, for installation of air conditioning in hotel, Royal St.

NEW ORLEANS—Mississippi Valley Flood Control Association adopted resolution for \$100,000,000 annual appropriation for flood control and improvement of Lower Mississippi River.

NEW ORLEANS—L. P. Smith Developing Co., Cartier Manor, has plans in progress for 34 residential units, Prentiss Park, \$275,000.

NEW ORLEANS—Dane and Northrop Developing Co., Gilmore Addition, Jefferson Parish, receiving bids, no date set, for 35 residential units, Gilmore Addition, part of 71-house project, \$263,000.

NEW ORLEANS—Crippled Childrens' Hospital, Inc., plan 40-bed new hospital for crippled children, \$600,000.

NEW ORLEANS—Victor Wogan, Bernard, de la Vergne, & August Perez have been selected to prepare plans and specifications for new \$2,000,000 Union Terminal Station.

NEW ORLEANS—Richard Koch, Archt., Queen and Crescent Bldg., has plans and specifications for \$400,000 men's dormitory for Tulane University.

NEW ORLEANS—Housing Authority, 226 Carondelet St., received low bid from A. G. Anthony, P. O. Box 648, Gulfport, Miss., \$245,600, for the Calliope project, and \$232,000 for the St. Bernard Ave. project, for installing gas distribution system in two housing projects.

NEW ORLEANS—Pan-American Life Insurance Co. let contract to George Glover & Co. for five-story office building, \$2,000,000.

NEW ORLEANS—Commission Council let contract to following for new \$370,000 Municipal Courts Building, 501 N. Rampart St.; Proj. No. 12,166—R. E. Neumann, 704 Frenchmen St.

NEW ORLEANS—Chalmette Vista Development Co. let contract to Chalmette Contracting Co. for 110-unit Chalmette Subdivision, St. Claude Ave., \$1,500,000.

NEW ORLEANS—Bayou St. John Development Corp. let contract to Lionel Favre Construction Co., \$150,000, for 10 residences.

NEW ORLEANS—Globe Construction Co., Inc., let contract to Albino Construction Co., \$500,000, for 60 residences.

NEW ORLEANS—Federal Corp., John S. Waterman and Frank S. Bennett, plans 8-story apartment, \$1,600,000.

NEW ORLEANS—Shelby Construction Co. plans erection of 1000-room apartment hotel, Claiborne Towers, \$10,000,000.

NEW ORLEANS—Maeco Apartments plans 9-story apartment, \$1,500,000.

PLAQUEMINE—Corps of Engineers, New Orleans, let contract to Walter P. Villere Co., 1100 S. Claiborne Ave., New Orleans, \$190,385, for 380,000 cu. yds. semi-compacted earthwork or 403,000 cu. yds. of uncompacted earthwork, removal of approximately 1,300 cu. yds. gravel road at East Atchafalaya Basin Protection Levee.

RAYVILLE—Rayland Parish School Board sold \$625,000 bond issue to Pohl & Co., Inc., Cincinnati, Ohio, for School District No. 3.

SHREVEPORT—Agudath Achim Synagogue, Herndon St., received low bid from H. R. Jenkins, 3837 Source Dr., for addition to community center, \$73,611.

SHREVEPORT—City Council let following contracts for new Shreveport Municipal Airport: Clearing and grading to M. R. Thompson, P. O. Box 18, Montgomery, Ala., at \$662,046; paving of two runways, City Construction Co., 2411 Inwood Road, Dallas, Tex., at \$1,196,495; fencing, Acme Fence Co., 820 Northwestern, Oklahoma City, Okla., at \$37,846.

SHREVEPORT—Louisiana State Fair received low bid from Werner Co., 1320 Pierre, for Youth Activities Building, State Fair Grounds, \$74,792.

SHREVEPORT—City Sec.-Treas. let contract to Cook Construction Co., Jackson, Miss., for Allen-Dalzell-Linwood Grade Separation Project, \$988,156.

SHREVEPORT—Caddo Levee Board announced work may begin in spring on first phase of \$250,000 project on Twelve-Mile Bayou.

SUNSET—City approved \$150,000 bond issue for waterworks and gas system improvements.

VINTON—City approved \$175,000 bond issue for water system improvements.

WINFIELD—City sold \$135,000 bond issue to White, Hattier and Sanford, New Orleans, for Tremont Park Improvements.

MARYLAND

MARYLAND—Highways to serve spreading metropolitan area about nation's capital, costing \$1,000,000 per mile.

MARYLAND AND WEST VIRGINIA—Corps of Engineers, Washington, D. C., let contract to Geier, Lynch, Inc., Wilmington, Del., \$1,734,702, for building pressure conduits and sewers for second phase of \$12,000,000 Cumberland-Ridgeley flood-control project.

MARYLAND—State plans \$9,390,000 bond

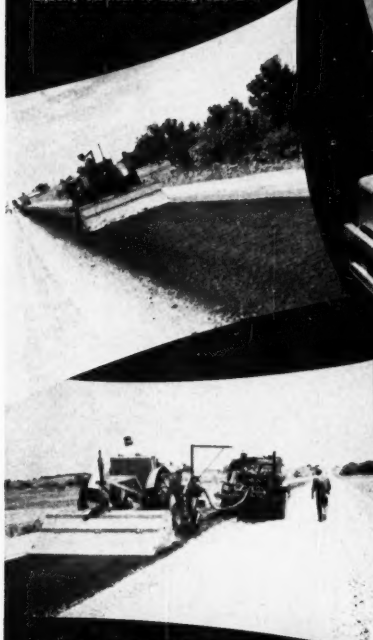
(Continued on page 20)

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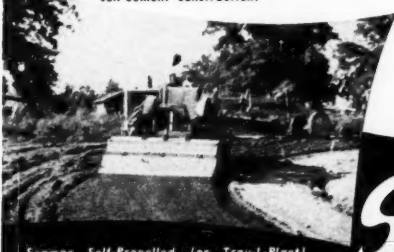
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Seaman Trav-L-Plant mixing in bituminous construction.



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A new SEAMAN development: the TRAV-L-PLANT keeps the internationally accepted, Seaman Pulvi-Mixer principle of blending road materials with a mixing chamber, but now the SEAMAN PULVI-MIXER is —

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Southern Construction Projects

MARYLAND

(Continued from page 18)

issue for schools.

ANNAPOLIS—Anne Arundel County Board of Education, 207 Hanover St., let contract to Hopkins and Wayson, Gaithersburg, \$97,000, for alterations and additions to Mill Swamp Elementary School.

BALTIMORE—Board of Estimates let contract to Charles R. Scrivener Co., Inc., 339 St. Paul Place, \$112,227, for swimming pool and bath house, Roosevelt Park.

BALTIMORE—City Board of Estimates, received low bid from Ligon & Ligon, Inc., 3310 Ridgewood Ave., \$71,577, for conduit line and manholes.

BALTIMORE—State Roads Commission let contract for project in following counties:

Anne Arundel and Queen Anne's—Contract No. CB-12-1-87—superstructure for Chesapeake Bay bridge, Section A&B; Bethlehem Steel Co., 701 Third St., Bethlehem, Pa., \$15,953,150.

BALTIMORE—Esso Standard Oil Co. will build 4 floating roof tanks at 1201 Ponca St., Canton, \$20,000.

BALTIMORE—State Roads Commission let contracts for projects in following counties:

Queen Anne's—Contract No. Q-228-1-215, 4 mi. improvement of Rt. 315; Eastern Highways Corp., Belle Grove Rd., \$246,255.

Talbot—Contract No. 118-2-215, grade, drain and surf, of highway beginning on State Rt. No. 33, 0.60 mi. macadam base course, penetration macadam base course and bitum. conc. surf. course; Hannaman-Burroughs Co., Salisbury, \$81,600 and \$80,622.

BALTIMORE—State Roads Commission in following low bids for project in following county:

Carroll—Contract No. CL-303-1-315; grad., drain, and surf., 3.50 mi. reinf. conc. surf.; Nello L. Teer Co., Durham, N. C., \$955,778 (crushed stone) and \$942,503 (quarried stone).

BALTIMORE—State Roads Commission let contract to C. J. Langenfelder & Son, Inc., 8427 Pulaski Hwy., \$54,429, for east causeway of Chesapeake Bay Bridge in Queen Anne's and Anne Arundel Counties.

BALTIMORE—Ellis & Bankert, Inc., will build 15 residences, 814-42 Benninghaus Rd., Gwynn, \$115,500.

BALTIMORE—Palladi Construction Co. will build 33 residences, 4900 block Lindsay Rd., West Hills, \$188,000.

BALTIMORE—At city announced construction would probably start in about six months on new People's Court building and renovation of the Court House; new building to be located at Fayette, Gay and Frederick Sts., \$2,500,000.

BALTIMORE—Cadillac Constr. Corp. will build 11 residences, 4002-10 Wilke Ave., \$81,500.

BALTIMORE—Pinckney Constr. Apts., Inc., 2625 Copley Rd., will build apartment house, \$125,000.

BALTIMORE—Board of Estimates let contract to Allied Contractors, Inc., 204 E. Preston St., \$67,073, for paint shop and ladder storage building and truck storage shed, Fire Department Repair Shop.

BALTIMORE—Board of Estimates let contract to Allied Contractors, Inc., 204 E. Preston St., \$219,616, for white swimming pool, Druid Hill Park.

BALTIMORE—Keystone Homes, Inc., 5627 Clearspring Rd., will build 32 residences, \$160,000.

BALTIMORE—Board of Estimates let contract to Ligon & Ligon, Inc., 3310 Ridgewood Ave., \$71,577, for conduit line and manholes.

BALTIMORE—Beth Yehuda-Anshe Kurland Congregation plan Hebrew school and synagogue, \$100,000.

BALTIMORE—Wm. J. O'Meara, P. O. Box 4, will build 24 residences, \$144,000.

BALTIMORE—Lexington Market Authority has plans under consideration for sale of approximately \$5,000,000 of revenue bonds to finance construction of new market.

BALTIMORE—Buitwell Homes Co., 4420 Mannasota Ave., will build 20 residences, \$100,000.

BALTIMORE—City Council has approved \$1,500,000 bond issue for conversion of gas illumination to electric street lighting, \$4,900,000.

BALTIMORE—State Roads Commission let contract for project in following counties:

Anne Arundel and Queen Anne's—Contract No. CB-10-11-87, sand islands to protect cable-anchorage Piers No. 23 and 28 of Chesapeake Bay Bridge; Construction Aggregates Corp., 1 E. 42nd St., New York, \$1,878,750.

BALTIMORE—State Roads Commission let contract for project in following county:

Anne Arundel—Contract No. AA-263-2-315,

conc. substructure of bridge over Severn River on proposed Annapolis Bypass; Merritt-Chapman & Scott Corp., 17 Battery Place, New York, \$3,349,800.

BALTIMORE—Master Plan Committee of City Planning Commission recommended series of expressways to channel traffic through congested areas, \$185,000,000.

BALTIMORE—Calvert Parking Corp. let contract to Piracci Construction Co., Inc., 2552 Woodbrook Ave., for off-street parking structure, 219-25 N. Calvert St., \$130,000.

BALTIMORE—State Roads Commission received low bid for project in following county:

Frederick—Contract No. F-425-5-615; 5-span steel plate girder and steel I-beam bridge supported on reinf. substructure over Monocacy River; Conduit & Foundation Corp., Philadelphia, Pa., \$762,182.

BALTIMORE—State Roads Commission received low bid for project in following county:

Frederick—Contract No. F-425-2-615; grad., drain, and surf. of divided hwy., 4.660 mi. crusher run sub-base, macadam base, and surf. course; W. E. Graham & Sons, Cleveland, N. C., \$138,095.

BALTIMORE—Housing Authority has approval for 5,000 low-cost housing units, \$650,000.

BALTIMORE—S. S. Kresge Co., 2727 Second Ave., Detroit, Mich., let contract to Cogswell Construction Co., for road #576, \$200,000, at 5501 Harford Rd. at Hamilton Ave.

BALTIMORE—State Roads Commission let contract for project in following county:

Washington—Contract No. W-366-1-615; modification of vertical curves, drain, and resurf. section of National Pike, 1.896 mi. macadam base course, penetrating macadam course and bitum. conc. surf. and resurf.; Bester-Long, Inc., Hagerstown, \$174,496.

BALTIMORE—Associated Jewish Charities preparing to erect first unit, \$300,000 recreation hall and kitchen building of the proposed \$12,000 Jewish Medical Center, Belvedere and Greenings Avenues.

BALTIMORE—Johns Hopkins University let contract to J. H. Williams & Co., Inc., 1122 Cathedral St., \$136,120, for biophysics laboratory building.

BALTIMORE—State Roads Commission received low bids for projects in following counties:

Kent—Contract No. K-173-1-215, grad., drain, and widening and resurf. of existing roadway and relocation along U.S. Rt. 213, 4.036 mi. macadam base course, penetration macadam base and surf. course and bitum. conc. bank run grav. aggr. base and surf. course; Bero Engineering & Construction Corp., Box 477, Centerville, Va., \$192,000.

Garrett—Contract No. G-248-5-615, furnishing, delivering and applying bitum. conc. resurf. along section of U.S. Rt. No. 219, 3.972 mi.; Keeley Construction Co., Clarksburg, W. Va., \$98,445.

BALTIMORE—State Roads Commission received low bid for project in following county:

Frederick—Contract No. F-425-4-615, 101-span steel plate girder bridge to carry Washington National Pike over U.S. Rt. 15, dual superstructures, including grad. and pav. 0.46 mi. section of U.S. Rt. 15 under and adjacent to bridge; Frank Pecora Construction Co., Inc., 214 E. Preston St., \$341,097.

BALTIMORE—State Roads Commission has plans in progress for 4.23 mi. section between Hanover and Jessup Rds., \$1,870,000.

BALTIMORE—Board of Estimates received low bid for following project:

Contract No. 1026—cement conc. for paving highways; P. Reddington & Sons, 2 E. Lexington St., \$87,538.

BALTIMORE—Delivery of Baltimore, Inc. let contract to Morrow Brothers, Inc., 2315 N. Charles St., \$520,352, for transfer station, Kirk and Bonaparte Aves.

BALTIMORE—Joseph Guzzo, 5221 Harford Rd., let contract to Guzzo Constr. Co., 5221 Harford Rd., for 14 residences, \$95,500.

BALTIMORE—County Commissioners, Towson, received low bid from Peter D'Adamo & Son, 2441 N. Charles St., Baltimore, \$113,551, for storm drains, Contract No. 178-D.

BALTIMORE—County Commissioners, Towson, let contract to Pittsburgh-Des Moines Steel Co., New York, N. Y., for 300,000-gallon elevated steel water tank, tower and appurtenances, Contract No. 172-W.

BALTIMORE—County Commissioners, Towson, received low bids for sanitary sewers, sewage pumping station and appurtenances, Contract No. 175-S; Fair A. Columbia Construction Corp., 10 W. 25th St.,

Baltimore, \$54,430; Part B, John Matricelani & Co., 405 S. Caroline St., Baltimore, \$40,576; Part C, Dickinson-Young Construction Co., 11 E. 21st St., Baltimore, \$29,900.

BALTIMORE—St. Agnes' Church, Charles and Mulberry Sts., let contract to Henry A. Knott, Inc., 2107 N. Charles St., for church at SW cor. Edmondson Ave. & St. Agnes Ln., \$100,000.

BALTIMORE—County Board of County Commissioners, Towson, received low bid from Ligon & Ligon, Inc., 3310 Ridgewood St., \$113,489, for storm drains, sanitary sewers and water mains, Rodgers Forge Apartments and Vicinity.

BALTIMORE—County Board of County Commissioners, Towson, received low bid from Ligon & Ligon, Inc., 3310 Ridgewood St., \$113,489, for storm drains, sanitary sewers and water mains, Rodgers Forge Apartments and Vicinity.

BETHESDA—Karl W. Corby will build 1500-unit apartment project on Rockville Pike, \$10,000,000.

CATONSVILLE—Department of Public Improvements, Baltimore, let contract to Cowell Construction Co., Inc., 2114 Maryland Ave., Baltimore, \$172,170, for employees' apartments, Spring Grove State Hospital.

CENTREVILLE—Queen Anne's County Board of Education let contract to Phillips and Thompson, Sudlersville, \$132,799, for additions and alteration to Centerville High School.

DUNDALK—Logan Village, Inc., 286-5th Ave., New York, N. Y., let contract to C. T. Willis, Inc., Box 3929, for 50 residences at Loganview and Virgins Dr., \$190,000.

ELLICOTT CITY—Howard County Metropolitan Commission let contract to A&M Construction Co., 224 Albemarle St., Baltimore, \$116,124, for water mains, fire hydrants and other necessary appurtenances, Elkridge Sub-District.

HAGERSTOWN—Herman L. Mills, Mayor, awarded to Lehman Brothers, New York, N. Y., \$1,500,000 bonds for electric light plant improvements.

HYATTSVILLE—Washington Suburban Sanitary Commission, Hamilton St., let contract to Leo Butler Co., Silver Spring, for approximately 24,850 feet of 42" supply line, near Paint Branch, Prince George's and Montgomery Counties, Contract No. 694-W, \$249,223.

HYATTSVILLE—Washington Suburban Sanitary Commission let contract to Segret Construction Co., Inc., 6040 River Rd., Washington, D. C., \$334,900, for water pumping station.

MOUNT WILSON—Department of Public Improvements, 566 Park Ave., Baltimore, let contract to Charles T. Kirk, Inc., 1017 Cathedral St., Baltimore, \$145,990, for steam distribution system, Mount Wilson Sanatorium.

PATUXENT RIVER—Navy Department, Public Works Office, Washington, D. C., received low bid from Neal McDonald, Leonardtown, \$36,656, for repairs to turntable platform.

PATUXENT RIVER—Navy Department, U. S. Public Works Office, let contract to Tidewater Construction Corp., 538 Front, Norfolk, Va., \$125,356, for bombing target facilities.

PRINCE FREDERICK—State Roads Commissioners, Baltimore, propose to build bypass, west of Rt. 2 mi. long, \$350,000.

RIVERDALE—Riverdale Presbyterian Church let contract to Martin Brothers, Washington, D. C., for church at Queens Chapel Rd. & Wells Pkwy., \$190,000.

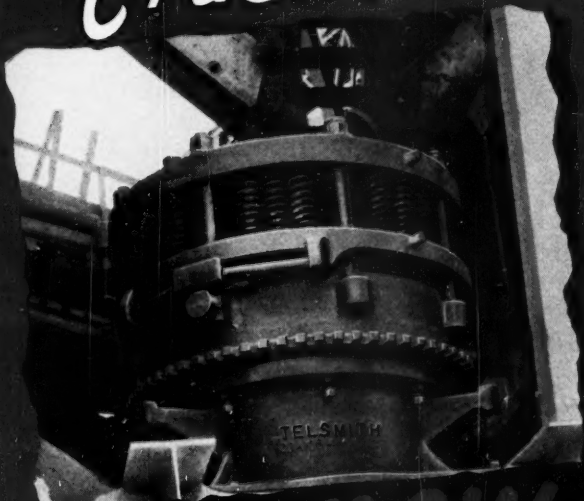
SILVER SPRING—Hecht Co. has plans in progress for addition of two floors to store, \$1,000,000.

SUDLERSVILLE—Queen Anne's County Board of Education let contract to Phillips and Thompson, Sudlersville, \$110,461, for alterations and additions to Sudlersville High School.

TOWSON—Goucher College let contract to

(Continued on page 22)

The New TELSMITH GYRASPHERE Crushers...



Send for
Bulletin
No. 274

TWO *new* MODELS

Style S—Standard
Style FC—Fine Crushing

Style S—Standard Gyrasphere has—

1. Longer Crushing Stroke giving greater capacity.
2. Larger Roller Thrust Bearings, both now located at top of eccentric.
3. More Eccentric Bearing Area in upper crushing zone.
4. Longer Springs to pass larger tramp iron.
5. New Location of Drive Gears for more economical operation.
6. Easier Accessibility for lower maintenance.
7. Available with either coarse or medium bowl.

Style FC—Fine Crushing Gyrasphere has these additional improvements—

1. New Feed Distributor for even feeding and a more uniform product.
2. Different Shape of Mantle and Concave with longer parallel crushing zone for finer product.
3. New Gun-Lock type mantle and concave holding devices—automatically self-tightening, easier to change.
4. More Springs for greater crushing pressures.
5. Available with either medium or fine bowl.

V-9

713 Commercial Trust Bldg. Philadelphia 2, Pa. Rish Equipment Co. Roanoke 7 & Richmond 10, Va. Rish Equipment Co. Charleston 22 & Clarksburg, W. Va. Interstate Eqt. Co. Statesville, N. C. L. V. Fraley & F. P. Gary St. Louis 10, Mo.
Brandels M. & S. Co., Inc. Louisville 8, Ky. Wilson-Wreaner-Wilkinson Co. Knoxville 8 & Nashville 6, Tenn. Priestley Mch. Co., Inc. Memphis 5, Tenn. Tractor & Eqt. Co., Inc. Birmingham 1, Ala. Southern Eqt. & Tractor Co. Monroe, La.
W. G. Caye & Co., Atlanta 2 R. C. Hardcastle Co., Oklahoma City 2 Martin-Lumby Co., Dallas 9 H. W. Lewis Eqt. Co., San Antonio 6

Southern Construction Projects

MARYLAND

(Continued from page 20)

HARRY A. HUGHES, 15 E. 21st St., Baltimore, for residence hall No. 3, E. side Dulany Valley Road, \$682,000.

UPPER MARLBORO—Prince Georges County Board of Education bid contract to Blake Construction Co., 33 E. SW. Washington, D. C., \$286,448, for 12-room Mount Rainier-Brentwood Elementary School.

WESTMINSTER—Carroll County Board of Education received low bid from Allen F. Feaser, Taneytown, \$147,236, for Westminster Elementary School.

MISSISSIPPI

BILONI—Beachwater Cafe, let contract to Bernard & Byrd, P. O. Box 1688, Mobile, Ala. \$53,168, for restaurant at West beach and Reynoir Sts.

COLLINS—Board of Supervisors of Covington County received bid from Charles Carter, Box 1270, Baton Rouge, La., \$167,985 for Covington County Hospital.

GREENWOOD—Board of Supervisors of Leflore County preparing to build 100-bed Greenwood-Leflore County Hospital, \$1,000,000.

GREENVILLE—Board of Supervisors of Washington County has plans and specifications nearing completion for remodeling and additions to County Courthouse and Jail, \$500,000; bids taken sometime in February.

GREENVILLE—Tennessee Gas Transmission Co., Houston, Tex., applied for authority to install four 26-inch pipelines on the Mississippi River highway bridge, \$2,355,880.

CRYSTAL SPRINGS—Crystal Springs Consolidated School District, plans school addition, \$150,000.

GREENVILLE—Board of Supervisors of Washington County have plans to be completed about December 15, for Washington County General Hospital, \$2,000,000.

GULFPORT—Army Levee, let contract to W. M. Craig & Co., \$85,000, for store at 25th Ave.

GULFPORT—City plans city-wide sewerage system to replace existing system, \$2,250,000.

GULFPORT—Hogue Lumber Contracting Co., will build 15 residences in Broadacres subdivision, \$100,000.

GULFPORT—Corps of Engineers, Mobile, Ala., received low bid from Standard Dredging Corp., New Orleans, La., \$323,662, for deepening Gulfport Harbor.

HATTIESBURG—Sacred Heart Parish, received low bid from Oden Construction Co., 208 Connor Bldg., \$354,453, for school and convent building.

HATTIESBURG—Mississippi Southern College, has plans in progress for building, \$2,000,000.

JACKSON—Board of Supervisors of Hinds County, plans County building to house Welfare Department, S. Congress at Tombigbee, \$100,000.

JACKSON—Board of Supervisors of Hinds County seeking authority to issue \$800,000 in bonds to complete football stadium.

JACKSON—City, Allen Thompson, Mayor, plans street lighting, \$260,000.

LAUREL—Board of Supervisors of Jones County, let contract to Batson-Cook Construction Co., West Point, Ga., \$858,940 for 105-bed Jones County Hospital.

LOUISVILLE—Acting U. S. Property and Disbursing Officer, Jackson, let contract to Perry Construction Co., Philadelphia, for armory, \$400,000.

MERIDIAN—East Mississippi Electric Power Association, has RFA approval for 467 miles of line to serve 1,487 new rural consumers, \$1,320,000.

NATCHEZ—Board of Supervisors of Adams County, let contracts to St. Catherine Gravel Co., P. O. Box 325, Natchez, for following: Lower Woodville Rd. paving, \$79,158; Liberty Rd. extension, \$86,902; Kingston Rd. extension, \$103,138; Pine Ridge Pk. extension, \$79,292 and Palestine Rd., \$35,754.

OCEAN SPRINGS—Board of Supervisors of George County, plans factory building to be leased to E. R. Moore Co., Chicago, Ill., \$100,000.

PICAYUNE—City plans 50-bed hospital, \$300,000.

STONEWALL—Erwin Cotton Mills Co., Durham, N. C., let contract to Fiske-Carter Construction Co., 200 Dunbar, Spartanburg, S. C., \$569,618 for weave building and extension to mill building No. 2.

TIPELO—North Mississippi Community Hospital Board of Directors, let contract to A. C. Samford, Inc., Albany, Ga., \$142,768 for 42-bed addition to present hospital and alterations.

VICKSBURG—Lutheran Hospital has plans in progress, to call for bids about January 15, 1950, for additional facilities to existing building, \$2,000,000.

WAYNESBORO—City has plans in progress for improvements and enlarging water supply and sewage disposal system; \$175,000 bond issue voted.

YAZOO CITY—Board of Supervisors of Yazoo County received low bid from Ballesey, New Orleans, La., \$36,169 for railroad track and ballast for Mississippi Chemical Corp.

MISSOURI

MISSOURI—Federal Government, Washington, D. C., allotted, \$18,122,917, for highway construction beginning July 1.

CLAYTON—Board of Aldermen, 10 N. Bemiston, let contract to W. A. Blue Co., 7820 Forsyth, \$82,943, for storm water sewer in Davis Place and Polo Drive.

CLAYTON—Board of Aldermen, 10 N. Bemiston, let contract to Victory Construction Co., 2240 Brentwood Blvd., Brentwood, \$71,909, for storm sewers in Old Town System & East Clayton Gardens System.

CARTHAGE—McCune-Brooks Hospital, has plans in progress for hospital, \$260,000.

CLAYTON—City received low bid from Woermann Construction Co., 3800 West Pine Blvd., St. Louis, \$76,000 for addition to City Hall, Northeast corner Forsyth & Bemiston.

CLAYTON—City, Board of Aldermen received low bid from W. A. Blue Co., 7820 Forsyth, \$82,943, for storm water sewers.

CLAYTON—City, Board of Aldermen received low bid from Victory Construction Co., 2240 Brentwood Blvd., Brentwood, \$71,909, for storm water sewers.

COLUMBIA—Boone Elec. Corp., Inc., let contract to Hufford & Kyger, 1810 E. 7th St., Terr., Kansas City, \$330,297, for 246.14 miles of line.

JEFFERSON CITY—State Highway Commission, received low bids for projects in following counties:

Jackson-Clay—Proj. No. F-394(3), Rt. 71, repairs to piers 5 and 6A.S.&B. bridge; Bushman Construction Co., St. Joseph, \$159,475.

JEFFERSON CITY—State Highway Commission, let contract for project in following county:

Callaway—Proj. No. F1-385(1), Rt. 40, 2,804 mi. GE & 24' PCC Pavt.; W. J. Menefee Construction Co., Sedalia, \$219,315.

JEFFERSON CITY—State Highway Commission, received low bids for projects in following counties:

Boone—Proj. No. F1-229(10)-B, Rt. 40, 1,117 mi. GE, bridge and 24' PCC pavt.; W. J. Menefee Construction Co., \$180,890.

Butler—Proj. No. F-204(5), Rt. 60, 1,545 mi. GE, bridges and 24' PCC pavt.; O'Dell & Riney Construction Co., Hannibal, \$308,279.

JEFFERSON CITY—Missouri State Board of Public Buildings, selected Marcel Boullault, 1294 Ambassador Bldg., St. Louis, as architect, for State Office Building, \$3,500,000.

JEFFERSON CITY—State Highway Commission, let contracts for projects in following counties:

Boone—Proj. No. F1-229(8)-A, Rt. 40, 2,104 mi. GE, br's and 24' PCC Pavt.; W. J. Menefee Construction Co., Sedalia, \$229,120.

Boone—Proj. No. F1-229(10)-A, Rt. 40, 4,940 mi. GE, br's, and 24' PCC Pavt.; W. J. Menefee Construction Co., \$417,030.

Boone—Proj. No. F1-229(10)-B, Rt. 40, 1,117 mi. GE, br's and 24' PCC Pavt.; W. J. Menefee Construction Co., \$180,890.

Newton—Proj. No. F-83(8), Rt. 71, 0.435 mi. GE, br. & 22' PCC Pavt.; Atkinson-Windle Co., Chillicothe, \$85,755.

Cape Girardeau—Proj. No. S-186(2), Rt. SU, 3,352 mi. GE, br's & grav. or cr. st. surf.; L. V. Steinhoff & James Kirkwood, Advance, \$44,000.

KANSAS CITY—Kehilath Israel Congregation, have plans completed for synagogue and educational plant, \$300,000.

LANCASTER—Tri-County Elec. Coop., let contract to Frick H. Constr. Co., P. O. Box 50, Linton, Inc., \$282,329, for 242 miles of line.

MEXICO—Consolidated Elec. Coop., let contract to Frick H. Constr. Co., P. O. Box 50, Linton, Inc., \$282,329, for 242 miles of line.

POPLAR BLUFF—Missouri-Arkansas Power Coop. board ground for power plant and distribution system, \$2,900,000.

POPLAR BLUFF—Corps of Engineers, Memphis, Tenn., let contract to Mississippi Valley Contracting Co., Paragould, Ark., \$57,996, for 290,000 cu. yds. levee work and 30,000 cu. yds. ditch excavation in Inter-river Drainage District in Butler County.

ROCK FORT—Atkinson-Holt Elec. Corp., let contract to Walco Engrg. & Constr. Co.,

2408 E. 4th St., Tulsa, Okla., \$498,066, for 353.85 miles of line.

ST. CHARLES—City, approved \$180,000 bond issue for extending and improving the sanitary storm sewer system.

ST. LOUIS—Ed F. Mangelsdorf & Brother, Inc., let contract to Gale E. Henderson, Granite Bldg., for addition to storage building, \$40,000.

ST. LOUIS—S. S. Kresge Co., Detroit, Mich., let contract to Murch-Jarvis Co., 718 Locust St., for alterations and remodeling of store, \$500,000.

ST. LOUIS—St. Louis Amusement Co., have plans completed for drive-in theatre, \$150,000, in St. Louis County.

ST. LOUIS—Franklin Bldg. Co., 4758 Duplessis Pl., will build 7 residences at 5515 to 5530 Flov St., \$70,000.

ST. LOUIS—Frank Hardt, 6032 Fyler Ave., will build apartments, \$70,000.

ST. LOUIS—Fay Lunsford, 3748 New Hampshire St., Affton, will build two apartments, \$75,000.

ST. LOUIS—Schwander Appliance Co., 3920 Olive St., plans warehouse and office, \$300,000.

ST. LOUIS—Federal Reserve Bank of St. Louis, 411 Locust St., let contract to Gamble Construction Co., 804 Pine St., for garage, \$270,000.

ST. LOUIS—R. & G. Investment Co., 1826 S. Broadway, let contract to C. Rallo Contracting Co., 5000 Kemper Pk., for one-story store, \$134,940.

ST. LOUIS—Schattgen Co., will build 32-unit apartment project, 5940-52 and 5949-61 Nagel Ave., \$320,000.

ST. LOUIS—Amusser-Busch, Inc., 721 Pestalozzi let contract to Fruin-Colon Contracting Co., 1706 Olive St., for beer storage extension, 1015 Arsenal, \$200,000.

NORTH CAROLINA

NORTH CAROLINA—Farmers Home Administration, has been allotted \$1,288,400 for farm home construction and improvements.

NORTH CAROLINA—Johnston County Board of Education, Smithfield, received low bid from J. M. Thompson & Co., at combination bid of \$184,611 for following schools, additions and alterations to school at Princeton; school for colored at Four Oaks; school for colored at Short Journey.

ALBEMARLE—City, let contract to C. W. Gallant & Glenn Construction Co., 206 Latta Arc, Charlotte, for Yadkin River Raw Water Pumping Station, \$144,940.

BLACK MOUNTAIN—Western North Carolina Sanatorium received low bids from following for nurses home: Southern States Construction Co., 2002 Blanding, Columbia, S. C., at \$91,662 on general, Southern States Construction Co., 2002 Blanding, Columbia, S. C., at \$72,940 on general, home for colored employees; Merchant Construction Co., Asheville at \$75,321 on general.

BURGAU—Board of Trustees, let contract to Parham-Darr Construction Co., 1250 Montlieu, High Point at \$123,900 for 25-bed Pender Memorial Hospital.

BURLINGTON—Brookwood Garden Apartments, plan 148-unit apartment, \$1,139,501.

CASWELL COUNTY—Board of Education of Caswell County received low bid from Grigg & Arthur Construction Co., Reidsville, \$233,916 for Cobb Memorial School.

CHARLOTTE—Lance, Inc., let contract to McDevitt & Street Co., Builders Bldg., \$148,500 for addition.

CHARLOTTE—Selwyn Presbyterian Church, plans church, \$125,000.

CHARLOTTE—Doctors' Building, Inc., let contract to J. J. Jones Construction Co., for doctors' building on King's Dr., \$500,000.

CHARLOTTE—Kraft Foods let contract to J. A. Jones Construction Co., 219 W. Fourth, \$100,000 for sales and distribution branch building.

CONCORD—Cabarrus County Board of Education, received low bid from L. S. Bradshaw & Sons, \$160,500 for Winesoff High School.

CONCORD—Concord Recreation Commission and Concord Graded School Board, received low bid from L. S. Bradshaw & Sons, \$153,106 for recreation center.

DAVIDSON—Davidson College, let contract to Thompson and Street Co., Charlotte, for church, \$600,000.

DURHAM—Liggett & Myers Tobacco Co., let contract to J. A. Jones Construction Co., 219 W. 4th St., Charlotte, for remodeling old cigarette manufacturing plant, \$115,000.

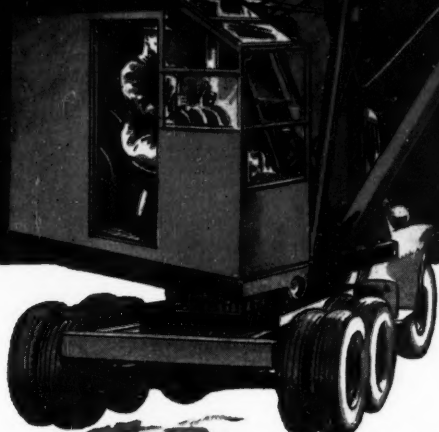
DURHAM—Congregational Christian Church, awarded negotiated contract to C. H. Shipp, \$50,500, for educational bids.

(Continued on page 24)

CHOOSE "QUICK-WAYS"

REG. U. S. PAT. OFF.

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In all power shovel applications, *capacity* and *utility* are essentials. A truck shovel must have high speed *mobility*, be immediately *convertible* and have *adequate capacity* to be economical on every job. A "QUICK-WAY" has all these fundamentals plus a long list of others.

"QUICK-WAYS" are designed for *full truck speed*, on or off the highway. Mounted on any standard truck, the working parts provide perfect operating *balance* for the truck shovel. All-steel construction gives built-in *strength* and *lightness* for maximum *capacity* and *stability*.

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mington, Guilford

FREE STATE EQUIPMENT CO.
Baltimore, Md.

POWER EQUIPMENT COMPANY
Knoxville, Chattanooga

RAY BROOKS MACHINERY CO.
Montgomery, Mobile

RISH EQUIPMENT CO.
Bluefield, Charleston, Cincinnati,
Clarksburg, Richmond, Roanoke

SOUTHERN EQUIPMENT SALES CO.
Columbia

PIONEER IN POWER SHOVELS FOR TRUCK MOUNTING AND STILL THE LEADER

Southern Construction Projects

NORTH CAROLINA

(Continued from page 22)

DURHAM—North Carolina College, received low bids for furnishing equipment for a new general heating plant: Division No. I, boilers and stokers, Dillon Supply Co., Raleigh, \$89,952; Division No. II, combustion control equipment, Boiler Equipment Service Co., Atlanta, Ga., \$11,442; Division III, feed water heater, Hoppes Manufacturing Co., Springfield, Ohio; Division No. IV, dust collectors and ID fans, Buety Co., New York, N. Y., \$20,688; Division No. V, coal handling equipment, Fairfield Engineering Co., Marion, Ohio; Division VI, ash handling equipment, National Conveyors Co., Inc., New York, N. Y., \$10,844; Division No. VII, boiler feed pump, Dillon Supply Co., Raleigh; Division No. VIII, radial brick chimney, Alphons Custodis Chimney Construction Co., New York, N. Y.

DURHAM—Lakewood Methodist Church, received low bid from Hunt Construction Co., \$84,950, for church.

DURHAM—Durham City Board of Education, let contract to Hunt Construction Co., \$99,995, for addition to East Durham Junior School.

EAST LAURINBURG—Waverly Mills housing project, plans sewer and water project, \$150,000.

ELON COLLEGE—Elon College plans campaign to raise \$100,000 for new gymnasium.

FAYETTEVILLE—Beth-Israel Congregation has plans in progress for community center, \$500,000.

FAYETTEVILLE—First Presbyterian Church received low bid from Grannis-Sloan, \$77,450, for recreation building.

FAIRMONT—School Board, let contract to O. W. Godwin, Dunn, \$15,780, for Rosewald High School.

GASTONIA—First Associate Reformed Presbyterian Church, received low bid from Barger Construction Co., Mooresville, \$113,400, for church.

GASTONIA—George R. Poston & J. Mack Holland, Jr., Gastonia and C. B. Spangler, Charlotte, let contract to C. B. Spangler Construction Co., Charlotte, for 100-unit apartment project, Eastover Apartments, \$677,774.

GOLDSBORO—Tri-County Elec. Membership Corp., let contract to Durham Electric Construction Co., 113-19 Orange St., Durham, \$231,706 for 199.4 miles of line.

GREENSBORO—Security National Bank, let contract to George W. Kane, for drive-in branch building, \$100,000.

GREENSBORO—English Construction Co., will build 24-unit housing project, \$172,000.

GREENSBORO—W. T. College received low bid from King-Hunter, Inc., 910 Market, \$193,363, for women's dormitory.

GREENSBORO—H. L. Coble Construction Co., 1705 Battleground Ave., \$980,700 for men's dormitory; electric, Talley Electric Co., \$56,486; freight elevator, Southern Elevator Co.; heating, Dick and Kirkman, \$65,688; plumbing, F. R. Holliday, \$82,126.

GREENSBORO—Mojud Hosiery Co., plans expansion and improvement program, \$1,500,000.

HIGH POINT—City let contract to N. E. Brewer Co., 8 W. 3rd, Winston-Salem, \$81,821, for water and sewer improvements.

KINSTON—First Baptist Church, let contract to O. L. Schackelford, at \$65,979, for church.

KINSTON—Caswell Training School received low bids for power plant, piping and equipment as follows: ash handling equipment, Beaumont Birch Co., \$14,900; power plant piping and distr. lines, J. L. Powers, \$123,810; conduits for underground lines, Sanford Construction Co., \$31,198; power electric work, Durham Electric Co., \$12,556.

MONROE—Union County Board of Education, let contract to Dickerson, Inc., Monroe, \$118,643, for new Salem School.

MOREHEAD CITY—Carteret County Board of Education, Beaufort, let contract to J. Raymond Ransom, \$88,290, for W. S. King School.

MORGANTON—State Hospital, North Carolina Hospitals Board of Control, let contract to following for water work improvements: Div. I, R. D. Cole Co., Newton, Ga., \$38,890; Div. II, Gibson Piping & Construction Co., Newton, \$3,950; Div. III and VII, Gilbert Engineering Co., Statesville, \$222,159; Div. IV, Purser & Londer, Charlotte, \$8,310; Div. V, Lee Construction Co., Charlotte, \$25,389; Div. VIII, National Watermain Cleaning Co., New Bern City Administrative Unit, let contract to J. W. Hunter, Wilmington, \$84,338 for addition to Ghent School.

NORTH WILKESBORO—Board of Trustees of Wilkes General Hospital, received low bid from P. S. West Construction Co., Statesville, \$548,000 for Wilkes General Hospital.

PASQUOTANK COUNTY—Local Government Commission, Raleigh, sold \$420,000 bond issue to Branch Banking & Trust Co., for school improvements.

RALEIGH—State Highway Commission, received low bids for projects in following county:

Gaston—bridge and approaches over Dutchmans creek on N. C., 0.132 mi.; Harvey H. Stewart, Charlotte, \$66,479.

RALEIGH—Sears, Roebuck & Co., have plans in progress for retail store, \$1,500,000.

RALEIGH—State Highway Commission, received low bids for projects in following counties:

Martin—grad. and paving on 9.01 mi. of N. C. 171; J. S. Hill Construction Co., Washington, N. C., \$113,519.

Bladen and Sampson—grad. and paving on 9.7 mi. of N. C. 41; Kiker & Yount, Inc., Reidsville, \$111,094.

Cumberland—grad. pav. and struc. on 8.14 mi. of U.S. 15-A; Zeigler-Cline Construction Co., Fayetteville, \$169,957.

Chatham—grad. pav. and struc. on 5.7 mi. of U.S. 64; Nello L. Teer Co., Durham, \$82,228.

Yancey and Mitchell—grad. and paving on 4.7 mi. of N. C. 197; Pullen & Owens, Nashville, Tenn., \$138,146.

Cherokee—grad. and paving on 3.82 mi.; Asheville Contracting Co., Asheville, \$174,093.

Cumberland—hard-surf. on 10.6 mi. (3 sections of county roads near Fayetteville); Zeigler-Cline Construction Co., \$59,456.

Johnston—grad. and hard-surf. of 6.02 mi. from end of pavement on Anderson St. at city limits of Seema north to Little Devine; Wayne Engineering Construction Co., Inc., Mount Olive, \$59,845.

Alamance—grad. and hard-surf. of 15.94 mi. (four sections of county roads; Nello L. Teer, \$233,730).

Orange—grad. and hard-surf. (2 sections) of county roads; Nello L. Teer Co., \$127,540.

Scotland and Robeson—surf. on 7.1 and surf. 24.88 mi. of county roads in Scotland and Robeson counties; Nello L. Teer, \$75,350.

Cabarrus—hard-surf. 24.2 mi. five sections of county roads; Dickerson, Inc., Monroe, \$119,901.

Rowan—hard-surf. 39.2 mi. (10 sections) of county roads; Dickerson, Inc., \$169,388.

Forsyth—hard-surf. of 8.3 mi. part 1 and 2; Nello L. Teer, \$92,466.

Iredell—hard-surf. of 25.05 mi. 5 sections of county roads; Dickerson, Inc., Monroe, \$128,016.

Wayne—grad. and hard-surf. of 12.7 mi. 2 sections in vicinity of Mt. Olive on Rt. 6; Wayne Engineering & Construction Co., Inc., Mt. Olive, \$77,450.

RALEIGH—West Raleigh Presbyterian Church, will erect building, \$125,000.

RALEIGH—North Carolina State College of Agriculture and Engineering, let contract to J. M. Thompson & Son, 304 S. Salisbury, \$72,842, for alterations and additions to power plant.

ROCKY MOUNT—American Bakeries, Inc., Atlanta, Ga., has working drawings in progress for building, \$300,000.

ROXBORO—Person County Board of Education, let contract to George W. Kane, \$86,649 for gymnasium.

SALISBURY—Mayor and City Council, received low bid from V. B. Higgins & Co., Greensboro, \$392,490 for water purification plant.

SALISBURY—W. H. Weaver Construction Co., Greensboro, will build Westview Courts Apartment project at Mahaley Ave., \$243,363.

SANFORD—Methodist Retreat, Lake Junaluska, Richmond, Va., plan hotel, part of \$600,000 improvement program.

SMITHFIELD—Local Government Commission, sold \$275,000 bond issue for Johnston County Hospital, R. S. Dickson & Co. and Assocs.

WAYNESVILLE—Board of Commissioners of Haywood, selected Lindsey Gudger, as Archt., for 51-bed addition to Haywood County Hospital; \$225,000 bond issue approved.

WAYNESVILLE—David Underwood has contract for \$100,000 fertilizer plant.

WILMINGTON—City Council, approved \$120,000 bond issue for water lines and sewer extensions.

WILSON—Atlantic Christian College, let contract to King-Hunter, Inc., 910 E. Market, Greensboro, \$155,740, for library.

WINSTON-SALEM—Seasick-Thalhimer, 500 W. Fourth St., let contract to Frank L. Blum Construction Co., for renovation and expansion program, \$1,000,000.

OKLAHOMA

Federal Government, Washington, D. C., allotted \$12,283,934 for highway construction beginning July 1.

Corps of Engineers, Tulsa, let contract to James Brothers Construction Co., Okmulgee, \$246,550, for clearing Hula Reservoir, Cane River, Caneey County.

ADA—Rock Products Corp., Adam, plans wool manufacturing plant, \$100,000.

ADA—East Central State College let contract to Denney Construction Co., Oklahoma City, \$247,713, for student union building.

ARDMORE—Southern Oklahoma War Veterans Hospital Building Commission plans dormitory and improvements, \$341,229.

BLACKWELL—Blackwell Zinc Co. will construct with force account, zinc smelter addition, \$125,000.

BLACKWELL—Blackwell Veterans Housing Corp. broke ground for 61 housing units, \$400,000.

ENID—First Methodist Church of Enid plans first unit of \$500,000 building project, \$150,000.

HYDRO—McNeill Grain Co. let contract to D. L. Walters, Professional Bldg., Amarillo, Tex., for 225,000-bu. grain elevator, \$89,000.

LINDSAY—Rural Electrification Cooperative, Inc., let contract to R. E. Mattison & Co., Box 458, Britton, \$255,617, for 212.9 miles of line.

NEWKIRK—Harold Flood, 407 Gilbert Bldg., Ardmore Archt., plans church, \$75,000.

NORMAN—Alpha Chi Sorority let contract to Lippert Brothers Construction Co., 2800 N. Santa Fe, Oklahoma City, \$150,763, for sorority house addition.

NORMAN—First Christian Church received low bid from Industrial Construction Co., \$63,809, for Sunday school addition.

OKLAHOMA CITY—Corps of Engineers, Tulsa, let contract to Grinnell Co., Inc., Dallas, Tex., at \$357,795, for installation of automatic sprinkler systems, Tinker Air Force Base.

OKLAHOMA CITY—State Highway Commission let contract to John B. Martin, Commerce Exchange Bldg., \$61,871, for 2-story extension to State Highway Department Materials Testing Laboratory Building.

OKLAHOMA CITY—Board of Regents of University of Oklahoma has plans in progress for out-patient department addition to present hospital, \$290,000.

OKLAHOMA CITY—U. S. Public Health Service, Washington, D. C., approved expansion of nurses' home and teachers facilities, University Hospital, \$300,000.

OKLAHOMA CITY—State Highway Commission received low bids for projects in following counties:

DePue—U.S. 59, 4.9 mi. aggre. base, double blum. surf.; Public Construction Co., Muskogee, \$134,612.

Latimer—SH 51, 2.5 mi. grad., drain., 30-ft. roadbed, 7 in. asphalt, conc. surf.; Metropolitan Paving Co., Oklahoma City, \$249,242.

Cherokee—SH 51, 6 mi. grad., drain., 38 to 53-ft. roadbed, 24 to 53-ft. wide conc. pav.; Brewer-McMichael, Inc., Holdenville, \$72,326.

McIntosh—SH 9, 1 mi. grad., drain., gravel, bridges at Shell Creek; J. B. Biles Construction Co., McAlester, \$50,840.

Garvin—U.S. 77 bypass, 5 mi. grad., drain., roadbed and conc. pav. on Lee and South Walnut Sts. in Pauls Valley; Layman & Sons, Tulsa, \$74,548.

OKLAHOMA CITY—State Highway Commission received low bids for project in following county:

Cherokee—SH 51, .04 mi. 208-ft. conc. girder span bridge, 18-in. sidewalks at Double Spring Creek; Brewer-McMichael, Inc., \$51,657.

OKLAHOMA CITY—Board of Education let contract to McCrae and Noffsger, \$116,500, for school.

OKLAHOMA CITY—Department of Highways will spend \$35,000,000 to \$40,000,000 in road improvements in 1950.

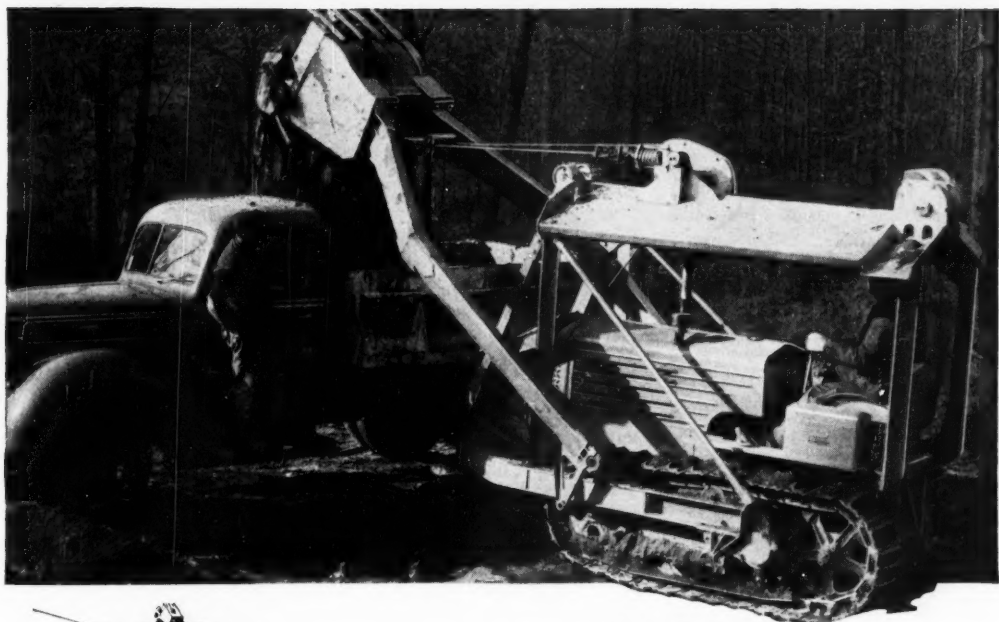
OKMULGEE—East Central Oklahoma Elec. Coop. let contract to Lemco Constr. Co., Muskogee, \$317,411, for 261.15 miles of line.

SAFEE—Northfork Elec. Coop. let contract to E-Line Constr. Co., 520 First National Bank Bldg., Oklahoma City, \$179,659, for 207.05 miles of line.

SEMINOLE—Canadian Valley Elec. Coop. let contract to Mid-State Const. Co., Karnes City, Tex., \$101,216, for 236.8 miles of line.

TOKAWA—Farmers Cooperative Association let contract to A. F. Roberts Construction Co., Sabatha, Kans., for grain storage elevator, \$125,000.

(Continued on page 26)



... a straight line is the economical distance between two points!

The straight-line operation of an Oliver "Cletrac" tractor and Sargent Overhead Shovel will cut your costs . . . *plenty!* Here's why!

This unit crowds *directly* back in digging or loading . . . moves *directly* forward to load out trucks. The shovel arms swing *directly* over the tractor. Contrast this fast action to ordinary loaders where the tractor must crowd into the pile . . . back out . . . turn

around and travel to truck or dumping pile. Easy to see why jobs move so much faster . . . why you can really cut costs!

And, the Basic Overhead unit can be quickly and economically converted to a Backhoe, Bulldozer, Pipe Handler, or Log Loader . . . a complete crew at a fraction of the cost of combined individual units.

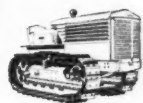
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A complete line of crawler and industrial wheel tractors



Southern Construction Projects

OKLAHOMA

(Continued from page 24)

TULSA—City let contract to Roberts and Scisson for improvements at Coal Creek disposal plant, \$21,108.

TULSA—Corps of Engineers plan synthetic fuel plant near Claremore, \$50,000,000.

SOUTH CAROLINA

Farmers Home Administration has been allotted \$835,400 for farm home construction and improvements.

ANDERSON—First Baptist Church let contract to Daniel Constr. Co., Greenville, for Sunday School annex, \$113,350.

CHARLESTON—St. James Methodist Church received low bid from Liberty Constr. Co. for Sunday School, \$94,273.

CHARLESTON—State Highway Department authorized new \$200,000 bridge across Edisto River on Rt. 17, near Jacksonville.

CHESTER—LaFayette, LaFayette & Fair, 1226 Sumter St., Columbia, Archts., plan 52-bed hospital, \$660,000.

CLINTON—Thornwell Orphanage let contract to Crosland Construction Co., 1623 Hardin, Columbia, \$87,172, for refrigeration storage and canning plant No. 2, gymnasium and recreation building.

CLINTON—Town plans \$350,000 for water and sewer expansion program.

CLOVER—Board of Trustees of Clover Public Schools, York County District No. 39, received low bid from Coulter & Co., 2921 Main, Columbia, \$217,900, for high school.

COLUMBIA—Veterans Administration, Washington, D. C., let contract to Ray M. Lee Co., 1004 Edgewood Ave., Atlanta, Ga., \$1,058,812, for Veterans Regional Office Building.

COLUMBIA—State Highway Department received low bids for projects in following counties:

Aiken—SC Doc. No. 2,218.3, FA Proj. No. FI-431(5), US Rt. 1, earth type base course and asphalt, conc. surf. on 10.802 mi.; Claussen-Lawrence Construction Co., Augusta, Ga., \$383,360.

Berkeley—SC Doc. No. 8,279, Parts 1&2, Rds. 32 & 47, grad. and bitum. surf. of 5.952 mi. on Rd. 32 and 3.380 mi. on Rd. 47; Banks Construction Co., Charleston, \$91,993.

Cherokee—SC Doc. No. 11,247, Parts 1, 2&3, FA Proj. No. S-313(1) & S-313(2), grad. and bitum. surf. of 2.559 mi. on Rd. 17 and 6.385 mi. on Rds. 69 and 17; Blankenship Brothers, Charlotte, N. C., \$88,493.

Clarendon—SC Doc. Nos. 14,263, Parts 1, 2 & 3, and 14,264, Parts 1&2, grad. and bitum. surf. of 3.299 mi. on Rd. 32 and 1.190 mi. on Rds. 56, 58, 87, 88, 89, 90, 11 & 110; Palmetto Construction Co., Inc., \$36,295.

Darlington—SC Doc. No. 16,266, FA Proj. No. S-360(1), grad. and bitum. surf. of 12.966 mi. on Rd. 28; Carolina Contracting Co., Columbia, \$106,897.

Dorchester—SC Doc. Nos. 18,256, Parts 1&2, and 18,258, grad. and bitum. surf. of 5.701 mi. on Rd. 16, and 1.138 mi. on Rds. 60, 18 & 134 being streets in Reevesville; George Lokey Contracting Co., Augusta, Ga., \$62,563.

Florence—SC Doc. Nos. 21,295, Parts 1&2, 21,296 & 21,299, FA Proj. No. S-322(1), grad. and bitum. surf. of 2.175 mi. on Rds. 85 & 98, 1.353 mi. on Rd. 35 and 3.511 mi. on Rd. 45; Palmetto Construction Co., Inc., Columbia, \$61,809.

Georgetown-Williamsburg—SC Doc. Nos. 22,257, Parts 1&2, and 22,258, FA Proj. No. S-318(1), grad. and bitum. surf. of 15.521 mi. at Rhems; American Construction Co., Columbia, \$173,165.

Horry—SC Doc. No. 26,269, FA Proj. No. S-333(1), grad. and bitum. surf. of 10.378 mi.; Cherokee, Inc., Columbia, \$134,273.

Laurens—SC Doc. No. 30,272, grad. and bitum. surf. of 7.611 mi.; Riddlehuber & Co., Inc., Greenwood, \$61,692.

Greene—SC Doc. Nos. 37,294, 37,297, 37,298 & 37,299, FA Proj. No. S-322(1) & S-322(2), grad. and bitum. surf. of 3.514 mi. on Rd. 46, 0.272 mi. on Rd. 46 being approaches to bridge at Cane Creek, 2.241 mi. on Rd. 108 & 107 and 3.737 mi. on Rd. 60; Spotts & Co., Newberry, \$101,039.

Orangeburg—SC Doc. Nos. 38,344, Parts 1&2, and 38,354, FA Proj. No. S-359(1), grad. and bitum. surf. of 5.548 mi. on Rd. 40 and 2.819 mi. on Rd. 91; George Lokey Contracting Co., Augusta, \$71,324.

Williamsburg—SC Doc. No. 45,262, grad. and bitum. surf. of 6.106 mi.; George Lokey Contracting Co., Augusta, Ga., \$56,471.

COLUMBIA—State Highway Department let contracts for projects in following counties:

Edgefield—Doc. No. 19,258; Lamb Construction Co., Edgefield, N. C., \$79,194.

Florence—Doc. No. 21,301; Wilson Construction Co., Marion, \$58,179.

Laurens—Doc. No. 30,267, (Parts 1&2, etc.); Spotts & Co., Newberry, \$81,827.

COLUMBIA—State Highway Department let contracts for projects in following counties:

Spartanburg—Surf. 6.425 mi. of Rd. 113; 1.403 mi. on Rd. 118, 1.957 mi. on Rd. 117 and 2.272 mi. on Rds. 143 through 165, 139, 177 and 178, all improvements at Spartanburg County churches and schools; B. L. Jones & Co., Winder, Ga., \$123,510.

Cherokee—Surf. and constr. of sidewalk on 0.328 mi. of Rt. 150 (Pfeifer St.), 0.227 mi. on Rd. 91 (Railroad Ave.); 0.4 mi. of Rd. 90 (Sixth St.), and 0.305 mi. on Rd. 31 (Scruggs St.); Charles E. Turnbull, Greenville, \$45,602.

Laurens—Grad. and surf. of 4.825 mi. on Rd. 37, 43 and 41, 1.968 mi. on Rd. 85 and 1.808 mi. on Rd. 42; Spotts & Co., Newberry, \$81,827.

Union—Grad. and surf. of 4.549 mi. on Rds. 58 and 36 and 5.684 mi. on Rd. 45; Spotts & Co., \$89,127.

COLUMBIA—Coble Dairy Products, Inc., plans distributing plant, \$90,000.

COLUMBIA—City let contract to Joseph W. Barnwell, Jr., 2226 Terrace Way, for swimming pool at Seagrass Park, \$72,000.

GREENVILLE—Lawyers Office Bldg., Inc., received low bid from Potter & Shackelford for office building, \$13,600.

GREENVILLE—South Carolina Baptist State Convention will discuss a \$7,000,000 long-range advance and capital needs program for South Carolina Baptist Educational and Benevolent Institutions, including Furman University, Women's College and North Greenville Junior College.

GREENVILLE—Housing Authority will seek \$10,000,000 in federal funds for slum clearance.

GREENVILLE—Lawyers' Office Bldg., Inc., let contract to Daniel Construction Co. for lawyers' office building, \$117,450.

HARTSVILLE—Board of Commissioners of Public Works let contract to Boyle Construction Co., Sumter, for sanitary sewerage system extension, \$109,061, and water distribution system extension, \$46,753.

HARTSVILLE—Board of Commissioners of Public Works let contract to Coulter & Co., 2921 Main St., Columbia, for sewerage treatment plant, \$112,978.

PICKENS—Blue Ridge Electric Coop., Inc., let the following contracts: Little Electric Co., Hartsville, for distribution lines, \$113,746; Sumter Builders, for transmission lines, \$22,454.

RIDGELAND—Palmetto Electric Coop., Inc., let contract to Chambliss & White Construction Co., Alamo, Ga., for 116 miles of REA lines, \$125,603.

SPARTANBURG—Board of Trustees let contract to W. M. Fine for Carver School and \$154,135 for Cleveland School.

SPARTANBURG—Housing Authority has approval for 400-unit low-rent housing project, \$2,500,000.

SPARTANBURG—City will spend \$289,622 this fiscal year for improvements and expansion of water works system.

WARE SHOALS—Ware Shoals School District No. 3 let contract to Manor Construction Co., Commerce Ave., Columbia, for Ware Shoals Colored School, \$125,580.

YORK COUNTY—Ebinport School Board let contract to York County Const. Co., Rock Hill, \$141,900, for Ebinport School.

TENNESSEE

TENNESSEE—State Highway Department, Nashville, will receive bids in January, 1950, for bridge over Cumberland River near Nashville, \$2,500,000.

CAMP FORREST—U. S. Air Force, announced plans for establishment of \$100,000, 000 Air Engineering Development Center.

CENTERVILLE—Merriweather-Lewis Elec. Corp., received low bid from G. T. Key Co., Montgomery, Ala., \$224,303, for elec. power line extensions and improvements system.

CLARKSVILLE—City approved \$150,000 bond issue for school building improvements, \$1,200,000 for water plant.

COPPERHILL—Polk County Board of Commissioners, Benton, received low bid from George W. Reagan Co., Knoxville, \$181,610, for high school.

COPPERHILL—Polk County Board of Commissioners, Benton, let contract to George W. Reagan Co., Inc., Knoxville, for Copperhill School, \$179,170; and Turtletown School, \$114,657.

COVINGTON—Dr. L. D. Elliston plans hospital type clinic, Main and Sherrod, \$395,000.

GALLATIN—Summer County Board of Education, let contract to Patton and Hosse, Nashville, \$232,140, for high school.

HUNTSVILLE—Board of Education received low bid from George W. Reagan Co., Knoxville, \$148,800, for high school.

JACKSON—Group of Doctors in Jackson, let contract to L. & M. Construction Co., 843 Vance Ave., Memphis, for clinic, \$100,000.

JACKSON—Madison County will soon call for bids for airport improvements, \$105,000.

JOHNSON CITY—Johnson City Power Board, let contract to Irby Constr. Co., Jackson, Miss., \$405,384, for 270 mi. of distribution line.

LAFAYETTE—Tri-County Elec. Membership Corp., has REA approval for 407 miles of line, \$840,000.

MARYVILLE—Johnson and Willard Construction Co., 422 W. Front Avenue, Knoxville, will construct a New Fine Arts Center at Maryville College, \$400,000.

MEMPHIS—State Purchasing Agent, Nashville, received low bid from Dougherty-Liddell Construction Co., 1360 E. McLemore, \$49,600, for physical educational building at Memphis State College.

MEMPHIS—Memphis Light, Gas & Water Division, has plans in progress for pumping station in South Memphis, \$5,000,000.

MEMPHIS—Schlitz Wolfson, Inc., will build 105 economy homes in Glenwood Park, \$682,500.

MEMPHIS—Harold High Co., will build 18 economy homes on Glens and Chatwood Sts., \$110,000.

MEMPHIS—Lauricella & Sizler, Inc., will build 84 residences on lake side of Jefferson Hwy., \$505,000.

MEMPHIS—Springdale Methodist Church let contract to James Canfield of Building Constructors, Derman Bldg., for sanctuary, \$100,000.

MEMPHIS—Wesley Memorial Evangelical Methodist Church received bids for educational bldg., \$375,000.

MEMPHIS—Hinton & Hutton Implement Co. let contract to Tri-State Constr. Co., \$125,000, for two bldgs.

MEMPHIS—Library Board, Wassell Randolph, received low bid from Fred Young, \$104,533 for Buntyn-Norman Branch of Cossitt Library.

MEMPHIS—Memphis Board of Education let contract to H. F. Vann & Sons, 1089 Galoway Ave., \$272,521 for grade school at Northwest corner of Summer and Graham.

MEMPHIS—Board of Directors Cossitt Library let contract to Fred Young, 166 Monroe Ave., \$104,973 for library (Highland Street Branch).

MEMPHIS—City plans woman's building at Mid-South Fairgrounds, \$300,000.

MEMPHIS—Tilman Cover Apartments, Inc., let contract to James Keltner Construction Co., Tilman St., for apartment buildings, \$500,000.

MEMPHIS—Bellevue Baptist Church received low bid from Foster & Creighton Co., Nashville, \$775,900, for auditorium and from Hughes Heating Co., \$143,473, for plumbing, heating and ventilating, for church.

NASHVILLE—Cooper-Martin Co., plans supermarket, \$200,000.

NASHVILLE—Board of Education received low bid from Gardner Construction Co., 714 Allison, Nashville, \$379,000 for Lake County Schools.

NASHVILLE—State Board of Education plans physical educational building, \$600,000.

NASHVILLE—City plans farmers market, \$1,000,000.

NASHVILLE—City let contract to Foster & Creighton, for electric service bldg., \$2,500,000.

NASHVILLE—Davidson County Board of Education, let contract to G & W Construction Co., 151 North 1st St., \$143,466, for school.

NASHVILLE—Newspaper Printing Corp., received low bid from V. L. Nicholson Co., \$765,000, for mechanical building.

OAK RIDGE—The Atomic Energy Commission plans expenditure of \$19,000,000 for construction and improvements at Oak Ridge National Laboratory; \$10,500,000 will be for new research facilities and \$4,200,000 for renovation of existing research facilities and utilities.

OAK RIDGE—Midland Land & Development Co., Midland, Texas, awarded contract at \$638,349, for rehabilitation of dwelling units.

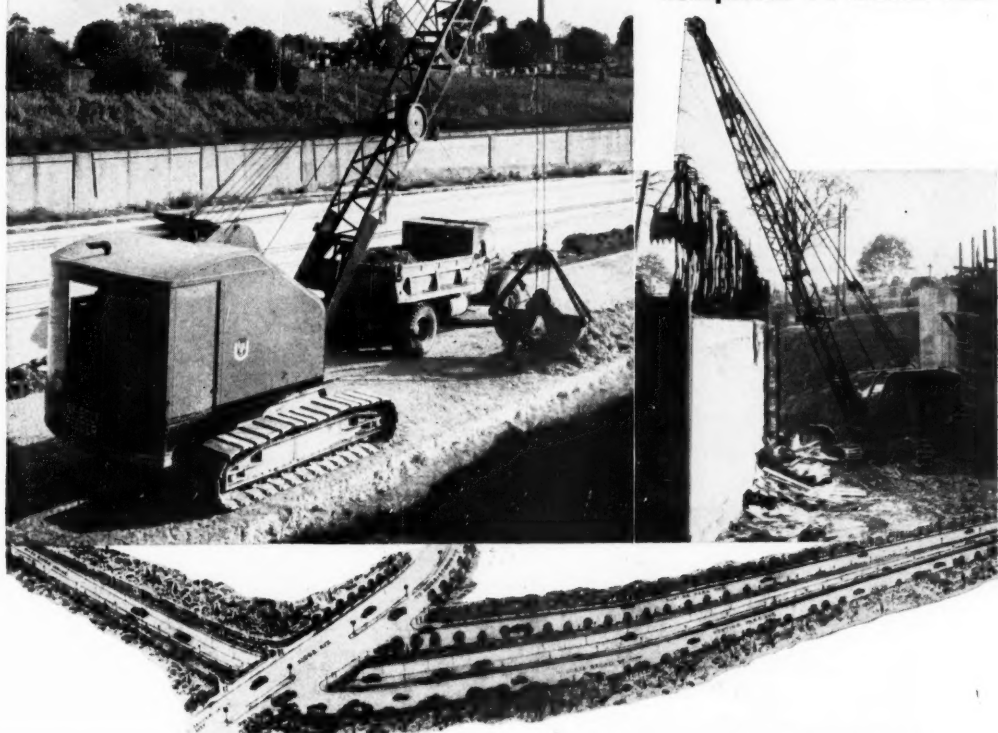
PARIS—State Department of Conservation, Nashville, plans dredging boat harbor, riprap shoreline, construction of filter plant and

(Continued on page 45)

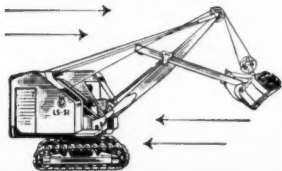
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LS-85 Helps Break Philadelphia Bottleneck

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THE FINAL YARDSTICK FOR MEASURING
HALF-YARD SHOVEL-CRANE PERFORMANCE

A Philadelphia traffic bottleneck was broken when the new Hunting Park Avenue-Ridge Avenue grade separation was completed.

McNichol Paving and Construction Company, contractors, found their LS-85 Link-Belt Speeder a valuable tool on this job, and it practically "broke a machine bottleneck" through its ability to perform a variety of operations. For over a year it worked at excavating, placing concrete, handling aggregate, forms, other materials, and cleaning up at the end. Operating 12 to 13 hours per day, the LS-85 was in perfect form every minute—a typical case of reliable high capacity performance and versatility you get in a precision-built, power-packed Link-Belt Speeder.

LINK-BELT SPEEDER \$1,800

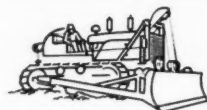


Bonus

Haul roads at Grapevine Dam, Texas, were built by this New TD-24, owned by J. W. Mosley, contractor. In addition it pulls tamping rollers totalling 70,000 pounds in weight! "The TD-24 has operated in extremely muddy conditions most satisfactorily," says Mr. Mosley. Its power and maneuverability gives it an edge that pays extra dividends.



CRAWLER TRACTORS • WHEEL TRACTORS • DIESEL ENGINES • POWER UNITS





Extra profits are yours whenever the New International TD-24 diesel crawler takes on your heavy earthmoving jobs. By reducing your operating costs while increasing your payload production, the TD-24 actually hands you a bonus every working day!

No other crawler can match the TD-24 in work capacity.

Quick starting, *on-the-go* gear shifting, instant high-low range speed changes, *eight speeds to 7.8 m.p.h. in each*

direction of travel, and turns with power on both tracks are a few of the exclusive operating features which make the TD-24 your big bonus producer.

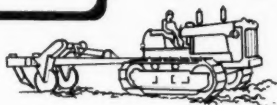
With its 140 drawbar horsepower, matchless maneuverability, and wide range of speeds at your finger tips, the New TD-24 is certainly the tractor you want. Thoroughly field-tested and job-proved, the New TD-24 is now available at your International Industrial Power Distributor's plant.

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Roadbuilders Deplore Day Labor, Oppose "Controlism," Endorse Free Enterprise at Their Fall Conference



Above—Thomas H. MacDonald, Commissioner of Public Roads, confers with Robie Dunman, of the president's Highway Safety Conference, and Reynolds Weaver, Automotive Safety Foundation.

DAY labor, the inadequacy of the country's highway system, opposition to "controlism," labor and free enterprise, federal policy on contract construction, and public relations to sell highways to the people were among the subjects highlighting the fall conference of the American Road Builders' Association held early last month at Washington.

Day labor—government performance of public works—was portrayed as "a cancerous growth we must incise" and an offshoot of slave labor methods with its roots "shrouded in the mists of antiquity" dating to the days when the pyramids and the Roman roads were built under such a system, by Archer B. Gay, Richmond, Va., contractor, and secretary-treasurer of the Virginia Road Builders' Association.

Day Labor Deplored

"The result has always been the same, a total disregard of cost, of time and an utter lack of efficiency," he said. "Despite striking proofs of extravagance and inefficiency, and equally impressive proofs of the superiority and economy of the contract method of performing highway construction work, the day labor method continues to raise its head and seek complete dominance in the field of public works. Perhaps this field is especially attractive to day labor advocates because the volume is large, or because it is being supported in part by Federal funds and is, as a consequence, spread throughout the entire country. Thus it offers its advocates rewards in the field of larger patronage possibilities, of political organization and, since highway construction is largely supported by special taxes on motor fuels, it also has a large financial field in which to range without hitting the general public's pocketbook with new direct taxes.

"Day labor is highly vulnerable to po-

litical manipulation, and no certain means are provided which will assure the owner of the ultimate cost of the project in advance of its actual construction. Workmen thus employed, in most cases, lack the small incentive offered in the hope of assured future employment and are prone to perform poor or at least indifferent work.

"This method usurps the function of properly constituted organizations, which have been perfected over the years. It increases far beyond the normal and necessary level the vast number of government employees. This, in turn, tends to increase the patronage privileges of those in authority and offers innumerable opportunities for the manipulation of votes in a particular locality. The monetary cost of the project may also offer opportunities for political manipulation and trading of favors, because this type of construction is seldom, if ever, controlled by fixed appropriations.

"Further, the day labor method would seem twice costly, since it tends to reduce the income of the government at all levels. In the final analysis, such income is always obtained from private business, and day labor tends to remove one more source of income from the already overtaxed public treasury. Thus, in effect, by employing this means of public construction, we are burning the candle at both ends. The project usually costs more than if performed by private contractors and the net result is a loss both at the income and expenditures end of the scale.

Lacks Contract Advantages

"Day labor construction sets up competition with private business which does not result in any advantage to the government or the public. If for no other reason, it should be opposed on this ground since it is perverse to the very fundamentals of our American system of

government."

Jennings Randolph, former West Virginia congressman and now a Capital Air Lines official, branded America's highways "so inadequate as to place the country in an untenable position as to security in the face of the cold war."

Responsibility for Defense Roads

Pointing to a recent Bureau of Public Roads-national military establishment report advocating \$11,266,000,000 for Interstate or Defense highways as proof of the need for "the driving force of leadership" from the Federal government, he stated that our townships, cities, counties and even our states cannot be expected to assume the responsibility for this work, which is national in character. Under existing conditions the responsibility for providing highways adequate to the national defense is a Federal undertaking, just as much as the responsibility for providing adequate fighting forces.

Mr. Randolph, who is treasurer of the 47-year-old Road Builders' Association, oldest national good roads group in the country, declared that the uneasy peace which has prevailed since war's end makes national security and national defense the principal reason for remedying "the woefully deteriorated condition in which the war left our highways." Preparation for possible war-time conditions "transcends even the long range economy involved in judicious investment in good roads in order to reap financial benefits for our agricultural, commercial and industrial interests," according to Mr. Randolph who added:

U. S. Remain Strong

"If the United States is to maintain the position of world leadership which World War II imposed on us, the first requisite is that we ourselves must remain strong. We must remain strong at home as well as abroad. It will avail us nothing to tell the world that our way of life is the best way if we cannot show the world the truth of our statements.

"Just as we have taken directly to the people our international problems, and have told them fully and frankly that our policy of working for world peace requires the investment of billions of dollars in aid to foreign countries, so must we take the issue of highways directly to the people. Our political leaders must have the courage to inform their constituents that the highways which are so essential to our national welfare and which constitute our very life-line require similar investments. We can no longer postpone a long-range, integrated highway program, carefully planned for continuous prosecution over a period of years. The hodge-podge growth of our highway system must give way to a bold, courageous method of providing our-

selves with an adequate track on which to operate our highway transportation which is so vital to our national security."

The road builders were called on to "take a stand" against highway construction by the state, a practice described as "a part of the controlism of today which leads to the socialism of tomorrow," by Dr. George C. Smith, research economist, Chamber of Commerce of the U. S., who spoke on a panel, "Merits of the Contract System Over Day Labor in Highway Construction."

"We might find day labor to be of great advantage if every American had to get out and do odd jobs for Uncle Sam for 61 days out of every year, as our colonial ancestors did for a considerably smaller number of days. For then we might have a lot less trend toward socialism than we have, as we would certainly have a better appreciation of the impact of the tremendous tax burden to which we are already committed, and which we are building up merrily, year by year."

Warning on Socialism

Warning that the country's descent into socialism will not be a plunge accomplished by any clear-cut vote on that issue, but rather through piecemeal adoption of legislation giving government ever greater controls, Dr. Smith said:

"The Socialist party, even in its heyday, never managed to scrape together as many as a million votes. It doesn't stand the ghost of a chance of winning an election. But what the Socialist party wants to do is being done with a speed that is amazing. It is apparent from legislation already adopted and from even broader legislation proposed that controlism is not simply a passing phase, but an ideology which is increasingly with us.

"Controlism leads to socialism. We find among the controlists alumni of the wartime control agencies—people who have tasted control and find controlling to their liking.

"Already one out of every six adult Americans receives regular checks from the government in one form or another. The controlists believe the government should enter directly into the operation of enterprise. This is being achieved step by step, and construction of highways by government, or its subdivisions, is an important step in this march toward socialism.

Labor and Enterprise

"It isn't easy to tell about any specific step. The best working test is: Does it call for the operation of industry by the state, or does it tend to create a climate in which, eventually, industry will have to be nationalized by the state? The general program of the controlists is socialistic, since it creates a climate so hostile to effective operation of free enterprise that the state must eventually step in."

Dissociation of highway construction from "made work," which he called "abhorrent to labor," was advocated by Louis G. Hines, a special representative of William Green, president of the American Federation of Labor who spoke on



Above—Archer B. Gay, Richmond, Va. contractor and one of the conference speakers; Sterry Mahaffey, engineer-director, Virginia Road Builders' Association, and T. E. Ritter, of Norfolk, new president of the Virginia organization.

"Labor's Stake in Free Enterprise."

Mr. Hines told the opening session of the two-day conference that "labor has a large stake in the free enterprise system. We don't want 'made work' any more than the most conservative group you can name. We want useful work. We don't want hand-outs. Labor prefers to work for private owners—not for the government, nor any state or any of its subdivisions—for we are keenly aware of the dangers lurking in too much government or government in business."

In the address, which was part of a panel discussion of "Merits of the Contract System Over Day Labor in Highway Construction," Mr. Hines deplored the depression-born association of "made work" with highway construction and declared:

"Labor believes in the American system of profits—providing those profits are reasonable and a fair share of them accrues to the men and women who, by their labor, help produce them. Our ob-

servation is that the competitive system of bidding known as the contract method is the most economical way of building highways. Generally speaking, the competition for such jobs restricts the profit in each to a reasonable amount. It is the exceptions, however, that give credence to the claims of politicians that they can do the work cheaper by force account or day labor. Those exceptions must be held to a minimum, and the contractors themselves must see to that."

Competitive System Economical

Asserting that "labor is just as interested as any other group in preserving and improving our country," Mr. Hines pointed to labor's record "in the matter of progressive legislation" and told the road builders they have been "passing up a good bet" by not enlisting labor in the job of advocating progressive legislation for an adequate highway program.

"What is needed," he said, "is a long- (Continued on page 32)

Below—Louis G. Hines, special representative of the American Federation of Labor; A. C. Clark, deputy commissioner of the Bureau of Public Roads, and Dr. George C. Smith, research economist with the United States Chamber of Commerce. All addressed the conference during the Day Labor-Contract System panel discussion.



Roadbuilders Conference Opposes "Controlism"

(Continued from page 31)

range program of highway construction and modernization to provide an adequate system of roads and streets at a minimum cost and a maximum of efficiency. This, it has been proven time and again, can best be achieved by workers employed by private businessmen, the contractors who are specialists in the field of highway construction. If contractors will be satisfied with a reasonable profit, they need have no fear of being driven out of business by encroachment of day labor construction methods. Here again labor can be helpful—in convincing politicians of the error of their thinking which leads some of them to the conclusion that government should go into the road building business. Government belongs in business only to the extent that business, by its inefficiency, or greed, or other vices, permits government to take over. Labor is prepared to help preserve the American free enterprise system, which constitutes the differentiating characteristic between living in the United States and living in too many other countries of our shrinking world.

"Labor staunchly believes in that system because, to state it in its most unaltruistic terms, labor prospers under that system."

Federal Work by Contract

Ninety per cent of Federal-aid highway construction since January 1, 1946, has been performed by contractors, but on jobs in this period in which the Federal Government did not participate, thirteen per cent of the work was done by state employed or day labor, it was revealed by A. C. Clark, acting deputy commissioner, Department of Construction and Maintenance, Bureau of Public Roads, in telling the association "the merits of the contract system over day labor in highway construction."

"The contract method of construction has always been given preference over the day labor method on Federal-aid highway construction," Mr. Clark declared, and "in fact, the regulations controlling the expenditure of Federal-aid highway funds require that construction be performed by the contract method, except in the few special cases when it can be definitely shown that it is in the public interest to use the day labor method."

Referring to the argument that contract construction tends to promote free enterprise, and stressing that such promotion is desirable, Mr. Clark warned:

"This objective alone, however, is not sufficient to justify the adoption of the contract method in preference to the day labor method, because if the costs were greater it would mean that public funds were being used to subsidize the contracting industry. The ever-present threat of resorting to day labor construction whenever contract costs become too high is a strong incentive to the contractors to continue to strive for greater efficiency

and economy in their operations."

Discussing the high prices following the war and high bids, Mr. Clark declared:

"The situation has been changing in recent months. Since the fourth quarter of 1948, the Bureau of Public Roads' composite mile price index shows that bid prices have been steadily falling and are now ten per cent below the 1948 peak. Hundreds of new contractors have now entered the highway field. From the beginning of 1948 to the end of September, 1949, Federal-aid contracts have been awarded to 895 contractors who had not previously been awarded such a contract during the postwar period. Several hundred other new ones have bid on one or more projects without receiving a contract. The average number of bids received per contract awarded during the first nine months of 1949 was six, which is an increase of fifty-eight per cent over 1947, when the average number of bids per project was 3.8."

Two Systems Discussed

The contract method and the day labor method of highway construction each should find its place and then stay within it, Mr. Clark said, "except perhaps for occasional encroachment upon the other's field to prevent the development of any attitude of complacency." Mr. Clark pointed out claimed advantages for both methods of construction and asserted:

"The Bureau of Public Roads has no present intention of departing from its long-established policy requiring that Federal-aid highway construction be done by the contract method except in the rare cases where it can be definitely shown that the day labor method would be most advantageous. There is, of course, a place for day labor operations in the Federal-aid highway field. Practically all routine maintenance and emergency repairs can undoubtedly be most economically done by the loyal, efficient and well-equipped employees of the state highway departments or, in the case of some secondary projects, of the county highway organization."

No Policy Shifts Seen

No basic changes or shifts in existing highway policies, programs or procedures are contemplated as a result of the recent transfer of the Bureau of Public Roads to the Department of Commerce, Under Secretary Cornelius Vanderbilt Whitney told the conference.

"The Bureau of Public Roads, as a constituent agency of the Department of Commerce, will continue its sound and responsible administration of the Federal-aid program for the construction and improvement of needed highways pursuant to the objectives and standards set forth by Congress," Mr. Whitney said. "The Department will continue its broad program of cooperative economic, administrative, and technical research and its activities in connection with the promo-

tion of safety on the highways. The Department sees no reason for changing the private contract method of road building.

"This does not mean, however, that the program is to be regarded as rigid. It must be flexible enough to adjust to changing national requirements. We must keep in mind possible need for whatever integration of public roads with the rest of the national transportation system may be found advisable after thorough study. Any needs of a national defense nature may have their effect upon the Bureau of Public Roads program."

John W. Darr, president of the Institute of Public Relations, insisted the highway industry and profession must take its story to the people in order to provide a highway system commensurate with the needs accentuated by war-time deterioration and neglect of roads and streets.

"Follow the methods long used by politicians and private enterprise," Mr. Darr counseled. Only a direct "selling" job of molding and guiding opinion, he said, can arouse the public to foot the multi-billion-dollar bill to provide a "transportation system composed of both vehicle and roadway adequate to the needs of the day."

Citing an increase of 13,000,000 motor vehicles since war's end and the fact that highway transportation "penetrates deeply into the whole fabric of our social, economic, and military life" as illustrating the public's stake in an adequate highway program, Mr. Darr declared:

Highway Transport Stressed

"The considerations involved go much deeper than the matter of joy-riding. As a Brookings Institution report recently pointed out, automotive transportation is the end product of America's greatest combination of economic activities. In this \$30 billion a year endeavor, which is a partnership between private enterprise on the one hand and government, or the people, on the other, the people can be sold, for they have an enormous stake in saving their investment in transportation."

Pointing out that the Bureau of Public Roads and defense authorities have reported that more than \$11 billion is needed to improve merely the little more than one per cent of the nation's routes constituting the interstate, or defense highway system, Mr. Darr said:

"In 1950, there will come before Congress legislative proposals for Federal-aid totaling well over a billion dollars, a record sum even in the midst of all our multi-billion-dollar budgets. These requests will be divided as follows: \$450,000,000 of regular Federal-aid; a like or greater amount for defense highways; and likely as much as \$150,000,000 for so-called local roads—routes ranking below the thoroughfares known as primary or secondary roads for which Federal-aid is furnished at present.

(Continued on page 33)

Construction Equipment Purchases Discussed

PRIOR to substantial mechanization and the early and subsequent development of the finely designed and built tools in use in today's construction, the contracting or construction business was one requiring enormous amounts of manpower wielding picks and shovels and the other relatively crude tools of former years. The contractor at that time required capital and bank credit primarily for payrolls and materials and much of the hand equipment then used could be considered as expendable materials.

With development of mechanization, the tools became larger and more efficient and also costly. From that point on, the contractor required machines that constituted real capital assets. Acquisition of capital assets by contractors made necessary a form of financing for the purchase of the machines that would permit amortization of the cost over the life of one or several jobs. This meant credit for terms running from a few months to a few years.

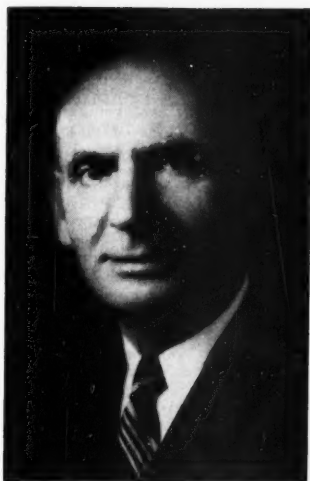
For three decades C.I.T. Financial Corporation has participated in construction machinery financing and in that time, says President Arthur O. Dietz, there has been no fundamental change in the industry's buying habits. The major shift of that kind in the construction machinery industry came about with the mechanization of the contracting business. It was this mechanization that created the need for financing such C.I.T. offers.

"Credit of this sort could not be met by short term loans suitable for payrolls and material costs," Mr. Dietz points out. Also, this longer term credit, although it has become more available in general banking circles within the last three decades, was not then generally available from such sources.

The growth of C.I.T. began at that time and was the result of a rapidly increasing demand for term credit by the many industries which during the Twentieth Century produced durable goods requiring such credit for their purchase. These kinds of durable goods are many, running from construction machinery and machine tools acquired by contractors and industrial plants to automobiles and appliances acquired by the individual consumer.

Today, not only consumers generally, but also contractors and manufacturers of many products acquire and replace the durable goods that they need by financing them over a period of time, which, according to the industry and type of commodity, may vary from one to three years.

Substantial amounts of credit were extended to the construction industry during the Twenties by financial institutions including ours. The depression of the 1930's demonstrated the underlying soundness of term or instalment credit as a form of financing despite the fact that it also highlighted some of the dangers from which soundly operated contractors,



Arthur O. Dietz

distributors, manufacturers and financing institutions learned the policies and practices that keep them healthy now.

This period demonstrated particularly dangers of extending credit without proper analysis and consideration of the ability of the purchaser to use and pay for the equipment he acquires, and also his ability prudently to manage his business. Carelessly extended credit is not only dangerous to the institution that extends it, but it is also bad for the welfare of the borrower and all industry.

The depression brought many industries, including construction, to a low point in production and sales and brought about a substantial liquidation of the instalment credit then outstanding. When business began to revive, the construction industry presented an interesting picture. The distributors who had weathered the storm were generally strong and sound institutions able to make their own financing arrangements for their instalment sales to contractors.

C.I.T. at that time began entering into contracts with distributors to finance those sales, as did some of the commercial banks. Also, this period saw a rather rapid development of some highly specialized machines for the construction industry. "This posed no new problem to our company," states Mr. Dietz, "except that the units required a larger amount of credit and careful analysis of the ability and prospects of the borrower. It did make it necessary for the contractor to require more capital and more credit to operate his business successfully."

The Second World War again diminished to a great degree the extension of instalment credit by distributors to contractors and also to distributors and con-

tractors. While enormous amounts of construction were performed primarily for war purposes and large amounts of credit needed, most of this credit was provided by the government. During this time C.I.T. continued to make credit available to distributors who required it, and also directly to contractors who were handling war-time jobs and required credit in order to perform them.

By early 1945 it was apparent that upon the ending of the war there would be a tremendous need for construction and that to get the job done, large amounts of new and better construction machinery would have to be acquired and financed. Manufacturers, distributors and contractors were queried to determine what would be needed and how best to provide it. There were huge amounts of work to be done to rebuild roads, bridges, factories, as well as housing and other new construction. The equipment fleets of the contractors were, for the most part, old and over-worked. They needed replacement and expansion.

With the ending of the war, the distributors were short of equipment and the demand was such that they were prepared to accept equipment as and when it became available from the factories, regardless of seasons or other considerations. The need was to put the units of equipment that could be acquired in the hands of the contractors as promptly as possible. In June of 1945, the company announced a revised financing plan for the construction industry, designed to make instalment credit available to distributors and contractors, as needed. This plan has been modified as needs and conditions have changed and is available today to sound distributors and contractors.

Since the plan was announced, several hundred distributors have used it in order to give to their contractor-purchasers the equipment they required upon an instalment credit basis. In addition, a program was provided under which contractors who were purchasing a variety of equipment and needed over-all credit for the purpose could make their arrangements with us. This has been particularly useful to large contractors buying substantial amounts of machinery, perhaps from a number of dealers, who preferred to arrange with us for credit suitable to their special requirements.

"Looking back over some thirty years," reminisces Mr. Dietz, "it seems that the success of our business has depended on its making available a form of instalment credit based on the needs of industries fundamental to our economy. Nothing is more fundamental than construction as it is the starting point from which homes, factories and offices develop, the starting point from which roads, bridges, dams and airports grow. We hope to continue to provide through credit a useful part of the services needed by the construction industry to perform its work."

R. E. A. Prepares to Start Telephone Program

ORGANIZATION of the administrative machinery for making loans authorized by the rural telephone amendment to the Rural Electrification Act signed on October 28 by President Harry S. Truman has been started by the Rural Electrification Administration, the U. S. Department of Agriculture has announced.

Rural Electrification Administrator Claude R. Wickard said that it will be several weeks before the agency is ready to act on loan applications because of the necessity of organizing the staff for the telephone loan program and of working out policies and procedures required to carry out the purposes of the new legislation.

The new program in as much detail as is available at this stage shapes up as follows:

Purpose of loans. Loans may be made for the purpose of financing the improvement, expansion, construction, acquisition, and operation of telephone lines, facilities, and systems to furnish and improve telephone service in rural areas. Up to 40 percent of any loan may be used to refinance existing indebtedness where such refinancing is necessary to furnish and improve rural service.

Who may apply. The Act says loans may be made "to persons now providing or who may hereafter provide telephone service in rural areas and to cooperative, non-profit, limited dividend, or mutual associations." Loans will not be made to individual subscribers.

Preferred applicants. The Act gives preference to existing suppliers of rural telephone service, whether commercial or mutual, and to co-ops or mutuals generally. It also specifies that for a period of one year from the effective date of the Act, October 28, 1949, an application from an operator already providing rural telephone service must be acted upon before action can be taken on an application from a new supplier for a loan to serve "substantially the same subscribers."

Basic conditions. The Act specifies certain basic conditions that have to be met before a loan can be made.

1. Assurance must be given that the loan will further the objective of the Act which is "to assure the availability of adequate telephone service to the widest practicable number of rural users of such service."

2. It must be shown that security for the requested loan is reasonably adequate and that the loan will be repaid with interest within the specified time.

In addition, an applicant subject to such requirement, under State Law, must have a certificate of convenience and necessity from the State regulatory body. In case of an applicant not subject to this requirement, assurance is required that the loan will not result in "duplication of lines, facilities, or systems providing reasonably adequate services."

How to apply. A statement outlining in general the procedure for prospective applicants will be issued soon.

Prospective applicants are advised that

it will serve no purpose to engage the services of paid agents or brokers to help them secure a loan. "REA has at no time permitted any part of its loan funds to be used for the payment of broker's or agent's fees, and this policy will be continued," Mr. Wickard stated.

With the President's signing of the new legislation, an appropriation, previously approved, authorizing \$25,000,000 for loan funds and \$250,000 for administrative expenses became available.

"We expect to handle the new program under the same general organizational framework as that under which the Rural Electrification Act is being administered," Mr. Wickard said. "It will, of course, be necessary to recruit additional personnel qualified in rural telephony."

"One of our first tasks will be to explore fully the ways in which the Act's declared objective of area coverage may be achieved through self-liquidating loans. The experience of people who have provided telephone service in rural areas offers potential guideposts and will be drawn upon to the fullest extent possible."

"Extension of adequate service into the 'thinner' rural areas will obviously focus critical attention on construction and operating costs. In the early history of the rural electrification program, simplification of equipment design, new methods of construction and standardization played a big part in reducing construction costs and in getting power lines to the farms of the country."

"Since the war the possibilities of using electric power lines for telephone communications by means of the carrier current have been talked about a great deal as the farmer's hope to get telephone service. So far, the cost of equipment for this purpose appears to be too high to permit general use. But it is one avenue that ought to be explored further."

"Importance of telephone service to our farm people was emphasized repeatedly in the Congressional hearings by those who spoke against, as well as by those who spoke for, the legislation. Yet rural areas lag far behind in telephone service. Figures just released by the Bureau of Agricultural Economics show that only 40 percent of the Nation's farms have telephone service of any kind. This is about the same percentage as in 1920, nearly three decades ago."

"Percentages do not tell the whole story, however. According to testimony presented at the hearings, much of the existing farm telephone service appears to be far from adequate. This means that improvement of existing service must in many cases go hand in hand with the expansion of service to more rural people."

"Another problem is inherent in the large number of small telephone enterprises which are potential borrowers of REA loan funds. It appears that there are about 6,000 independent commercial telephone companies, many of them with rural lines. In addition there are many thousands of farmers' mutual or cooperative telephone enterprises ranging in size

from a half dozen to more than a thousand subscribers."

"In general, the States with the lowest percentages of farms with the telephones appear to be also the States with the smallest number of mutual associations. This holds particularly true in the South where the farms with telephones total less than 20 percent in most States."

The new Act, which amends the Rural Electrification Act of 1936, empowers the REA Administrator to make self-liquidating loans for the extension of telephone service in rural areas on the now familiar "REA pattern."

An essential feature of this "REA pattern" is the area-coverage principle; that is, service on the same basis for all throughout the area. In the case of the rural telephone legislation, the Congress stated the policy explicitly:

"... it is hereby declared to be the policy of the Congress that adequate telephone service be made generally available in rural areas... to the widest practicable number of rural users of such service."

The Act further specifically requires that the REA administrator, in making loans obtain assurance that this policy will be carried out.

In making loans, the Administrator is required to give preference to applicants, both commercial and nonprofit, already providing telephone service in rural areas, and to cooperative, nonprofit, limited dividend, or mutual associations generally.

As a further incentive to existing rural telephone systems to cooperate in the accomplishment of the basic objective of the Act, it is provided that during the first year of the program, applications for loans from existing companies, both commercial and nonprofit, must first be considered and acted upon, before applications from new enterprises covering substantially the same subscribers may be acted upon.

As in the case of rural electrification loans, rural telephone loans may not be made "unless the Administrator finds and certifies that in his judgment the security therefor is reasonably adequate and such loan will be repaid within the time agreed."

The interest rate is 2 percent per annum and the amortization period must not exceed 35 years, although a shorter period may be prescribed or agreed upon.

The adequacy of the security to be required and the amount of the loan which is made are matters for determination by the Administrator.

In order to accomplish the basic statutory purpose of extending or improving telephone service in rural areas, the Administrator may make loans "for the purpose of financing the improvement, expansion, construction, acquisition, and operation of telephone lines, facilities, or systems," where the Administrator determines that such action is necessary in particular situations in order to accomplish the basic objective of the Act.

EQUIPMENT AT WORK

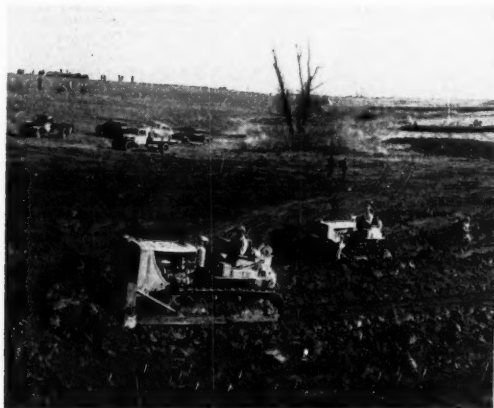
By L. H. Houck

"ORCHARD OF TOMORROW"

Two thousand persons watched members of the Cooper County Terracing & Soils Contractors Association build ponds, terraces and waterways in a demonstration of construction equipment at the Orchard of Tomorrow field day, on Bell Orchard, near Boonville, Mo., Nov. 11. Contractors donated one day. The world's largest apple pie, weighing 874 pounds, was cut and distributed at noon. The event was sponsored by University of Missouri College of Agriculture, Missouri State Horticultural Society, Boonville Chamber of Commerce, and proved that heavy construction machinery is essential to rebuilding farm lands.



Left to right: Calvin Huff, contractor, Boonville, who had two Allis-Chalmers graders on job; K. C. Link, representative Cooke Sales & Service, Chillicothe, Allis-Chalmers dealers; Alva L. Mix, soils contractor, inventor of rear-mounted terracing attachment for Caterpillar tractors; Leonard Schlotzhauer, Pilot Grove, soils contractor, using Austin-Western 99-H grader.



Late model Caterpillar D-7 with Caterpillar dozer equipment owned by Johnmeyer Bros., Fayette, Mo. (left) and Caterpillar D-6 with Caterpillar equipment owned by Joe Knipp, Tipton, Mo. building the Orchard of Tomorrow 2-acre pond 11 feet deep.



Terrace building demonstration by 99-H Austin-Western power grader owned by Leonard Schlotzhauer, contractor of Pilot Grove, Mo. Frank Pilman, factory man from Aurora, Ill., is at the controls.



One of two late model AD-3 Allis-Chalmers graders building Orchard of Tomorrow terraces and owned by Calvin Huff, contractor, Boonville, Mo., with Mr. Huff at controls. Each contractor was assigned a complete terrace to build.



At another level on the slope to be terraced, Alva L. Mix built a terrace with his newly invented rear-mounted blade attached to a D-6 Caterpillar tractor with Caterpillar bulldozer.

Equipment and Material Makers' News

New 10-Ton Rear-Dump Euclid



New Euclid UD Rear Dump Unit.

Model UD Rear-Dump Euclid is the latest addition to the line of earth-moving equipment of the Euclid Road Machinery Co., Cleveland, Ohio. This model has a payload capacity of 10 tons—struck measure is 6.6 cu. yds. Other Euclid equipment, Bottom-Dump and Rear-Dump models, range in capacity from 15 to 40 tons.

Powered by a 125-horsepower diesel engine, Model UD is designed for heavy off-the-highway hauling in construction, mine, quarry and industrial work where a unit of a 10-ton capacity meets job requirements. It is built to the same rigid standards of construction throughout as the larger capacity models and incorporates such features as the Euclid planetary drive axle, 10-speed heavy duty transmission, three stage double acting hydraulic hoist, and free floating spring mounting for front and drive axles. Top speed with capacity payload is 35.7MPH.

New "35" Sinker Rock Drill

Independent Pneumatic Tool Co., Aurora, Ill., manufacturers of Thor portable power tools, announces a new Model 35 sinker rock drill.

The new Thor 35-pound class drill incorporates all the time tested features of five previous sinkers in the Thor line. It features powerful, constant blowing and unusually strong rotation for such light weight.

The Model 35 has passed rigid field tests on such applications as the following: horizontal drilling in mines and quarries when mounted on the new Thor Sinker Leg and equipped with Tungsten carbide bits; in public utilities—for drilling test holes for gas leaks; in industry—for drilling deep anchor bolt holes for mounting machinery; in coal mines—fitted with front and back head lugs for easy sliding on boards in "snake hole" drilling; in quarries—for secondary drilling of large boulders.

Long Life of Trucks

According to M. D. Douglas, general manager of the GMC Truck & Coach Division of General Motors, trucks that have been driven a million miles or more are becoming almost commonplace. Mr. Douglas attributed the long life to three major factors: sound basic engineering, careful selection of optional equipment for the specialized use the unit is to serve, and a program of preventive maintenance.

Mr. Douglas says that the average driver may cover from 10,000 to 15,000 miles a year and assuming he drives a great deal—say 50,000 miles a year—it would take 20 years to drive a million miles. Probably that amount of driving would wear out five to fifteen passenger cars. Trucks, however, are built for endurance. There are records of some of the Diesel units which were driven a million miles in less than eight years. One eleven-year-old unit, which may have established a record, has now covered more than 1,700,000 miles, most of it on scheduled runs between Colorado and Texas.

New Illustrated Brochure Released by Dravo

Mechanical ventilation of industrial structures to remove air contaminated by fumes, dust or gases necessitates another function that is of equal importance—replacing, or making up, the air that has been exhausted from the building. The manner in which this can be accomplished efficiently and economically in foundries and other types of industries is described in a new illustrated brochure recently published by the Heating Section of Dravo Corp., Pittsburgh.

The bulletin explains that introduction of clean, fresh "tempered" makeup air into a factory structure has two primary benefits: improvement of employee health and morale by elimination of foul air and balancing atmospheric pressure inside the building to increase the efficiency of combustion equipment and ventilating systems.

The Dravo "Counterflo" Heaters described in the brochure perform a triple function: drawing in the air from the outside, heating it to desired output temperature and distributing it uniformly and without drafts throughout the working area. During the summer, with the same equipment, the air can be brought in and distributed without heating it.

Developments Revealed In Annual Review

Allis-Chalmers' general machinery division in its latest annual review scheduled for release early in 1950 reveals engineering, product and research development aimed at providing public works and power projects with highly efficient equipment for more economical operations. To accomplish this, company production lines have been modernized, new testing facilities added and, wherever feasible, standardization of product designs is underway.

New developments in Allis-Chalmers' v-belt sheave lines include redesigning of the entire line of cast iron adjustable sheaves to provide longer and heavier hubs and a generally sturdier construction; a worm gear control of stub-shaft and through-shaft motion-control Vari-Pitch sheaves, an anti-creep device for use on Vari-Pitch sheaves where the hand-wheel must be held at a precise setting, and a floor stand adjusting mechanism for large Vari-Pitch motion-control drives where an idler is used.

The smaller size Allis-Chalmers rotary compressors were redesigned in 1949 for simpler maintenance and to reduce the number of sizes needed to cover normal volume and pressure requirements. The new unit is designed so that each size of machine can be used as either a compressor or a vacuum pump over a wide range of conditions by adopting different operating speeds. Now only four machines are needed to cover the range of operating conditions formerly served by 11 units. This simplification of the company's compressor and vacuum pump line will be extended to cover the larger units manufactured by Allis-Chalmers as well.

Kessler, Pfahl Promoted by New Holland Company

Norman H. Kessler, former chief sales engineer, has been named chief engineer of the New Holland Manufacturing Co., Mountville, Pa.

James D. Pfahl, a member of the sales staff, has been named assistant to the sales manager.

Kessler had been with New Holland since 1946. Prior to that he had helped his father, Lee H. Kessler, develop the principle of dual impact action which New Holland now builds into its double impeller breakers. While studying mechanical engineering at Cornell, Kessler worked with his father in the latter's Hornell Gravel Corp. in New York.

After New Holland licensed a patent covering the new breaking principle, Kessler joined the organization as development engineer. He has played a major part in developing the Models 1212, 2020, 3030, 4040 and 5050 breakers now produced by New Holland.

Pfahl joined New Holland in 1947 as a sales correspondent. He attended the University of Virginia and Shady Side Academy in Pittsburgh.

Dur-O-Line Markers

Al Matson and Bob Nelson of the Traffic Safety Supply Co. of Portland, Ore., after many years of experiment and research, have developed Dur-O-Line, a 4 1/2-inch diameter, plastic disk attachable to either concrete or asphalt pavement with a mastic and metal pin. Dur-O-Line markers are the efficient way of safety marking, developed to meet the urgent need of traffic engineers who are constantly searching for an economical, permanent material for line marking.

The new markers are applied with ease and serve ideally to separate lanes of travel with no fading or smearing problems common to paint. They are highly visible under all weather and driving conditions and maintenance problems are kept to a minimum. The markers are designed and produced to withstand the severest road treatment and carry 15 times the maximum legal load limit. They are manufactured in permanent brilliant yellow and dead white and two workmen can install 100 markers in an hour.

Ceco Products Marks 30th Anniversary

Approximately 3,500 were present at Ceco Steel Products Corporation's celebration of its thirtieth year in Chicago. The affair commemorated the opening of the Chicago district plant in Cicero in 1919, seven years after the firm originated in Omaha, Neb.

Functional displays were viewed in each general office department before the tour into the main plant, where visitors saw the manufacture of steel residence casements and other steel sash, steel casing, storm windows, combination windows, metal frame screens, steelforms, steel joists, steel roof deck, metal lath, metal roofing and siding and many related products. Among the displays were visual charts showing the firm's operations in 14 other plants and 24 sales offices throughout the country.

The tour ended with the serving of refreshments and the presentation of a packet containing the following literature: a post card showing a dramatic view of Ceco's general office building and main plant; a "hello" folder which Ceco receptionists present to Ceco visitors during the regular business day; charts showing "How Ceco Grew in Cicero"; a folder illustrating "Ceco Coast to Coast"; Ceco's Chicago plant, employee handbook, "Your Job at Ceco Steel"; the firm's national safety handbook, "Safety Signals at Ceco Steel"; miniature reprints of current advertisements, and a booklet explaining the suggestion award system at Ceco, entitled "Good Ideas Pay."

Thor Literature Released

A new E-2 catalog covering the entire Thor universal electric portable power tool line including the sensational Silver Line tools has recently been released by the Independent Pneumatic Tool Co., Aurora, Ill. The new catalog gives complete data, including prices on all Thor universal electric tools.

Also available is circular No. JE-1131 covering the new Thor Silver Line 4 1/2-inch universal electric belt sander. The circular gives complete data on the latest addition to Thor's Silver Line and is printed on a single sheet punched for binder insertions.

CPI-2 New Jointing Compound

A new jointing compound, CPI-2, is now available from the W. S. Dickey Clay Manufacturing Co. It is made from coal tar pitch, a high-temperature condensate from coal distillation, and free of its more volatile components. The jointing compound forms a strong, lasting bond with all pipe surfaces. It looks and feels hard, but retains sufficient flexibility to prevent cracking should the line shift or settle slightly. It creates a dense joint, without air holes, cracks, or other flaws and resists penetration of roots from the outside or the exit of moisture from the inside.

CPI-2 jointing compound has many characteristics that make it an ideal jointing material for vitrified clay pipe. They are: it is acid and alkali proof; exceptional adhesion; pours easily and quickly; flexibility or "cold flow," and root resistance.

Rubber Springs Developed

United States Rubber Co., New York, has developed rubber springs which take the jerks and bumps out of riding a tractor. These springs are based on a torsional shear principle. They consist of a thick layer of especially compounded rubber sandwiched between two metal plates. The rubber is fastened to metal by a special brass plating process. The springs are mounted in pairs on a new tractor seat now being produced by the Bostrom Manufacturing Co., of Milwaukee, Wis. The springs can be adjusted for various weights on a 160-pound farm girl to a husky driver weighing 275 pounds.

Bulletin Released On String-a-life Lines

The Mines Equipment Division of Joy Manufacturing Co. announces completion of an attractive two-color, 12-page bulletin on their String-a-life lines for portable light and power transmission. Numbered SL202, it describes, illustrates and prices latest designs of these popular assemblies of portable light and power outlets for industry.

To simplify installation and provide maximum portability, lines are sectionalized. Each section interconnecting at proper intervals to form one continuous light or power string. When so connected, assembly is dirt-proof, moisture-proof and oil-resistant. Manufacturer claims sections assemble simply, increase safety, reduce maintenance and can be used again and again under the most adverse operating or climatic conditions.

Lester D. Baggett Dies

Lester D. Baggett, division purchasing agent in charge of cotton buying for United States Rubber Co., died November 7 of a heart attack at Lubbock, Texas, while on a business trip. He was 58 years old.

Mr. Baggett began his career in the cotton business at the William H. Pharr Cotton Co. in 1917 and was later affiliated with the Armstrong Cotton Mills, Gastonia, N. C.

In 1928 he joined U. S. Rubber, serving as cotton buyer with headquarters in the company's New York office. He organized the company's cotton buying office in Memphis, Tenn., in 1935 and has been in charge of the department since that time. He was the company's representative on the Memphis Cotton Exchange and supervised the buying of raw cotton directly from growers throughout the southern states.

Mr. Baggett was graduated from the University of Mississippi in 1909. Prior to his affiliation with the cotton business he was an instructor in Latin at the Webb School, Bell Buckle, Tenn.

Huber Releases New Maintainer Bulletin

Huber Manufacturing Co., Marion, Ohio, recently announced publication of Bulletin No. M-138 describing the Huber Maintainer.

The 16-page, 2-color bulletin explains how the Maintainer's several front-end attachments can be used for a wide variety of construction and maintenance applications. The 42-horsepower, 6,000-pound "All-Purpose" Huber can be operated as a grader, berm leveler, road planer, bulldozer, lift-loader, snow plow, highway mower, one-way broom, and patch roller.

Link-Belt Publishes New Catalog on Fluid Drives

Link-Belt Fluid drives are featured in a new 28-page catalog and engineering data book No. 2385 released by Link-Belt Co., Chicago, Ill., to replace previous catalogs on this subject. It is a progress report on the Link-Belt Electrofluid drive, "ED" type, which the company announced three years ago as a compact, packaged power transmission unit providing for smooth, cushioned starting of machines, smooth running under varying conditions of loading, and automatic overload protection. In addition to the motorized type "ED," there is now the gearmotor type "EG." Also included are Types "FD" and "FG" units, which are the equivalents of the "ED" and "EG" with the exception that input shafts are supplied in place of integral motors. Fluid drive arrangements for applications as high as 20HP are shown. The contents of the new book may be summarized as covering types, sizes, arrangements and dimensions of units available; features of construction; advantages to the user; selection tables; typical examples of fluid drive selections, and numerous photographs of actual installations.

Allis-Chalmers Points Out Deficiencies in Road System

Allis-Chalmers Manufacturing Co., Milwaukee, Wis., has inaugurated an advertising campaign to point out the glaring deficiencies in our national road system in an effort to awaken the citizens to the needs for an improved and expanded national highway system.

"Of the 3,300,000 miles of roads, streets and alleys in the United States, 3,000,000 miles are in rural areas and less than half of this rural mileage is hard surfaced. Yet 20 per cent of our total population work or live on farms. Farmers own almost a third of all our trucks and a fifth of our passenger cars."

"The entire nation, not just the farmer, suffers from farm isolation, for highways lead in both directions. Trade to the farm as well as from the farm is hindered by poor roads."

"As more lanes of commerce are protected from the whims of weather, more of the products of industry and farm can be enjoyed by everyone. Better roads are an important foundation for better living."

New Steel and Pipemaking Facilities at Lorain

Construction of National Tube Company's extensive new steel and pipemaking facilities in Lorain has been virtually completed. It was announced by John E. Goble, president of this unit States Steel subsidiary. Workmen are not putting the finishing touches on the new mills, which involve new facilities from one end of the plant to the other, from handling of raw materials to shipment of finished products.

Major units in the improvement program at Lorain are the world's first continuous seamless pipe mill, new blooming, bar, and billet mills, an entirely new Bessemer steel plant, 177 new by-product gas ovens, and a modern warehouse for pipe storage under roof. The new steelmaking facilities boost National Tube's output at Lorain to approximately 2,250,000 tons annually.

The improvements also include enlargement and modernization of coal and coke handling facilities, numerous changes in the facilities for recovery of coal chemicals, and a coal and coke laboratory. Also included is 25 miles of new railroad tracks. More than 250,000 cubic yards of concrete were poured for building foundations, new roadways, and other uses. More than 1900 carloads of new machinery and equipment have been installed. The new mills required 51,300 tons of structural and reinforcing steel. More than 500 miles of piping have been installed for water, steam, air, electricity and other utility transmission lines.

Laboratory Being Constructed

A new laboratory to provide expanded facilities for research in high energy fuels is being completed in Cleveland, Ohio, for the National Advisory Committee for Aeronautics by H. K. Ferguson Co., industrial engineers and builders. The investigations at the new laboratory will supplement work already being carried on at the Lewis Flight Propulsion Laboratory here. The one-story building will contain four test cells, 12 chemical and physical laboratories, shops and utility rooms. The building, of structural steel, concrete and masonry construction, is designed to withstand explosive forces and insure complete safety of personnel.

Folding Gooseneck Added

The latest addition of the Martin Machine Co., Kewanee, Ill., to its line of "Carryhaul" trailers is a patented folding gooseneck which, when lowered to the ground, forms a loading ramp.

Advantages are: the need for heavy, cumbersome loading ramps and cribbing is completely eliminated; idle man and equipment hours are reduced to a minimum; it provides greater clearance for viaducts, bridges, and wires, allowing fast and safe movement between jobs. An additional feature of this trailer is the patented tandem axle assembly which is completely suspended in rubber for flexibility and independent wheel action. The assembly has no grease fittings, requires no lubrication, and has no pins or bushings to be replaced.

In operation, the folding gooseneck is lowered to form a loading ramp which provides a uniform incline from the ground to the trailer platform. When the trailer is loaded, a power-operated winch on the truck-tractor raises the gooseneck to towing position. The entire procedure is a one-man operation.

Stockyards Sewer Line



Northwest shovel powered by General Motors diesel lifts dirt tunnel on Stink Creek job at Omaha, Nebr.

A sewer now being built by the Michigan Sewer Construction Co., to be completed in 1950, will eliminate the last open stretch of "Stink Creek" at the stockyards in Omaha, Neb.

Operating 50 to 100 feet underground, this construction company is tunneling and pouring concrete for a sewer 12 feet in diameter and approximately three-quarters of a mile in length through which drainage from the stockyards and environs will be diverted. Dirt is lifted from the tunnel by a Northwest shovel equipped with a 40-foot boom and powered by a General Motors 3-cylinder Diesel engine. Despite its 3 1/2-yard rating, the shovel consistently raises a 2-yard box which is usually loaded with wet sand a distance of 50 feet. When broken concrete or other heavy materials are raised the weight in the box is often as much as 4 tons.

Actual digging operations are conducted under pressure and workmen must traverse a compression chamber upon entering and leaving the tunnel. Dirt is moved by rail car back to the mouth of the tunnel where it is raised to the surface.

Swing Loader, Crane, Backhoe

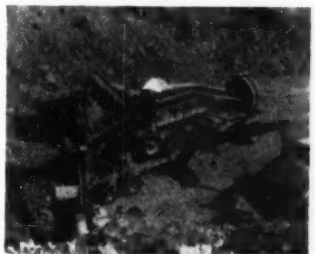
The illustrated bulletin on the swing loader, crane and backhoe, recently released by the Mandt Manufacturing Co., Columbus, Ohio, describes latest type hydraulic powered loader handling from 3/4-yard standard material bucket up to 2-yard snow bucket with 180° swing. Attachments provide quick conversion to mobile yard or factory crane.

Cedarapids "Rock-It" Plant

Recently developed by Iowa Manufacturing Co., the new "Rock-It" crushing and screening plant is a double-duty plant that will replace two single units. Designed specifically for the aglime, chip and road stone fields, the "Rock-It" produces crushed stone or aglime, or a percentage of both, in one operation. Capacities range from 60 to 80 tons per hour.

Simple design and compact construction make the "Rock-It" a highly portable plant. The only parts to remove to meet highway transportation requirements are the charging hopper and delivery conveyors. Other features include: Accurate gradation of the finished product, centralized controls, low feeding height for shovel feed, anti-friction construction throughout.

Made up of standard Cedarapids units, the "Rock-It" Plant consists of a 24-inch by 8-foot apron type feeder and charging hopper with grizzly; a newly designed roller bearing jaw crusher with a full 18-inch by 24-inch jaw opening and jaws of standard thickness; a 42-inch by 10-foot horizontal vibrating "aglime" screen; a Cedarapids hammermill, either 3033 or 2033, and a Cedarapids return wheel system of Monorail design. A 3018 Roll may be used in place of the hammermill. A 2025 Primary crusher may be used in place of the 1824.



Cedarapids "Rock-It" Plant.

Equipment and Material Makers' News

"Split-Second Fastening"

More than a score of cost-cutting opportunities available to industry through the use of automatic stud welding are shown in a new 18-minute color sound movie "Split-Second Fastening," recently completed for the Nelson Stud Welding division of Morton Gregory Corp., Lorain, Ohio. In addition to animated sequences which clearly explain the revolutionary stud welding process by which fasteners are end-welded to steel, the film shows how it is used in building construction, railroad shops, shipyards, automotive plants, the fabrication of electrical equipment and numerous other applications in practically all phases of the metal working industry.

Engineering and Production Equipment Booklet

Continental Industrial Engineers, Inc., Chicago, Ill., consultants, engineers, and manufacturers of completely equipped plants, production lines, special machines and heat-processing equipment, has issued a new twelve-page booklet describing in detail the broad scope of their services to industry. Included are many illustrations with detail descriptions of a wide variety of production lines and automatic processing equipment covering practically every industry.

New Gyra-Flo Exhauster Has Low Noise Level

The Chicago Blower Corporation is offering its new Gyra-Flo power exhauster for applications requiring the very lowest operating noise levels. Described as well suited for ventilating schools, churches, hospitals, theaters and institutions, it can be used wherever roof ventilation is applicable.

Exclusive features of the new Gyra-Flo exhauster begin with its design, which controls the flow of air through the exhaustor so that turbulence and discharge losses are reduced to the absolute minimum. This factor, plus the lowest possible wheel tip speeds, keeps the noise level of the fan to a new low never before achieved. Free air deliveries range from 680 to 53,000 CFM.

Made in 17 throat sizes, from 12 to 68 in. Overall height, from 31 1/2 to 64 1/2 in. The complete inner structural framework is of exclusively heavy steel plate, with rigid reinforcing, assuring years of trouble-free service even under the most severe operating conditions. The wheel is of the backward curved type, with steep pressure curves and non-loading power characteristics. Wheels are balanced both statically and dynamically for vibrationless operation.

Fluorescent Bathroom Light Announced by Sylvania

A compact new fluorescent lighting fixture which can be centered on each side of a bathroom mirror and is easy to install has been announced by Sylvania Electric Products, Inc., according to B. K. Wikstrom, General Sales Manager of the Lighting Division. Both models—R-114 and RO-114—contain a single 14-watt Sylvania fluorescent lamp, have heavily plated chrome end pieces which add a decorative touch, and white reflectors.

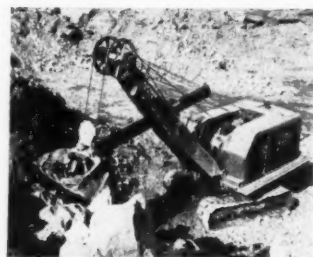
It provides adequate illumination with a low surface brightness, is easy to mount on the wall and is easy to keep clean. Slotted holes in the rust-resistant, zinc-plated back plate match the mounting ear in a standard wall box, while the width of the fixture—2 1/2"—completely covers the conventional type rectangular wall box which holds standard incandescent type lighting brackets. In old construction, where a round-type box is found, the unit can be used in conjunction with a conventional box cover supplied by an electrician. The Sylvania R-114 series also have a regulation 3/4" knockout for wiring and mounting holes at either end of the back plate.

A. M. Shaw Promoted

Appointment of A. M. Shaw as assistant manager, Pump and Compressor Merchandising division, has been announced by F. J. Whelan, vice president, Worthington Pump and Machinery Corp.

Mr. Shaw will be responsible for the development of pump and compressor sales to original equipment manufacturers. His activities will come under the supervision of J. O. Glenn, manager of the division.

New 2-Yard Excavator—The 51-B



Bucyrus-Erie 51-B Shovel.

Production of a new 2-yard power shovel—the 51-B—is announced by Bucyrus-Erie Co., South Milwaukee, Wis. Convertible in the field for crane, dragline, clamshell or shovel service, the 51-B will meet the demands of general contractors and mine and quarry operators needing an all-purpose machine to turn out big yardages day in and day out.

Front End features include: a single unit inside dipper handle, twin-rope crowd independent of the hoist, for dragline and clamshell service, booms from 50 to 90 feet in length are available, crane booms may be purchased up to 130 feet in length, and additional length for the lifting crane may be provided by using one of several job extensions available for the 51-B, and with 60-foot boom at 34-foot working radius, the 51-B will handle 28,000 pounds.

Detailed information may be obtained about the new 51-B from local Bucyrus-Erie distributors or by writing the manufacturer.

New Anemostat Folder

A new 4-page folder, Bulletin 29, that explains the performance and application of the new square Type E aspirating air diffuser, is available gratis from Anemostat Corporation of America, 10 East 39th St., New York, N. Y.

Illustrated, the folder describes how the square outlet provides draftless air diffusion over a full 360° arc with the same efficiency as a circular unit. Also how it offers a wide variety of air distribution patterns by use of equalizing deflectors.

Huber Machines Used on Airport

Four Huber road machines handling key jobs in the construction of the new Marion municipal airport's two runways and taxiway are a heavy-duty motor grader, a Maintainer and two rollers. W. H. Ringwald and Sons, of Chillicothe, Ohio, are handling the runway building contract and J. E. Green is Ringwald's superintendent on the airport project.

The area covered by the airport property is approximately 600 acres. Each of the two runways is 100 feet wide. The northeast-southwest runway is 4,300 feet long and is laid out on a line 60 degrees of north. The



Huber Maintainer operating on Marion Municipal Airport job.

northwest-southeast runway is 3,500 feet long and lies on a line 60 degrees west of north. The administration, building and terminal will be midway between the two runways. The terminal apron on which airliners will load is connected by a wide paved taxiway which runs due east and west. It in turn connects with a north-south taxiway, also paved and 50 feet wide, which connects with both runways.

Haiss Power Wheel Buckets

Haiss power wheel buckets for the job of reclaiming sand, loose gravel, stone, coal and clinders, manufactured by the George Haiss Manufacturing Co., Inc., New York, are for speed, capacity, strength, low upkeep, rope economy and compact dimensions, says the maker.

The power wheel closing of the bucket jaws is fast, the ratio being 3:4 to 1. This is a prime asset in handling coal or other easy-to-dig materials. The buckets have strength and sturdiness without weight which is achieved through the use of high-grade alloy steels, and by providing broad surfaces to withstand wear and racking strains. They are equally designed for material loading and unloading. The widely used 1 1/2 and 2-yard sizes have exceptional low headroom requirements which, with the wide deck covering area, when open, facilitate barge unloading. Sufficient weight has been put into the bucket to give it workability and wear resistance, but without excess to constitute a wasteful dead load.

Haiss coal special clamshell buckets are lighter in weight and greater in live load capacity. Its special features are: a bowl shape for extra digging power to fill a heaping load, cast steel blade arms for brute strength to resist bending strains, high-carbon steel cutting edges to armor the bowl where the work comes, high-back bowl and with high ties to hold and prevent spillage of a heaping load, bronze bushings and alemit lubrication, round, forged steel arms—save hatch cuttings from abuse, rigid locked head piece acts as a unit with one pair of arms and prevents weaving, and special analysis, rust-resisting, abrasion-resisting steel side chains for maximum wear resistance.

Water Wheel Redevelopment

Holyoke Machine Co., Holyoke, Mass., one of the oldest builders of hydraulic turbines and water wheels, includes in its present expansion program the redevelopment of its line of wheels to the requirements of present practice. An important feature of the program is specialized inspection service for customers.

To head the hydraulic department, they have recently appointed L. H. Perry, a trained engineer, whose lifetime of practical engineering experience in all phases of water power development, includes the design, testing and supervision of domestic power units as well as the design of many foreign installations.

Mr. Perry is a member of the American Society of Mechanical Engineers and is a registered professional engineer in Massachusetts.

Formerly with James Leffel & Co., Springfield, Ohio, as mechanical engineer, designing hydraulic turbines for both government and private power plants, Mr. Perry was, prior to that, with Charles T. Main, Engineers, of Boston, supervising the design of hydraulic and mechanical equipment for government power plants. He was also for a number of years hydraulic engineer in charge of the water wheel department at the Rodney Hunt Machine Company.

Dravo Corporation Sponsors Safety Training

Dravo Corporation has started the second in a series of on-the-job safety training meetings for Contracting Division engineering and supervisory personnel at its current construction projects. The second group includes personnel from the Monongahela River Lock No. 2 project at Braddock, Pa.

The program covers five bi-weekly sessions each dealing with specific phases of safety. The first, by J. Griffin, safety director of the Corporation, conducted the first conference for the Braddock group. His topic was "Keeping Out of the Red," emphasizing the need for sound safety instruction with supervisory follow-up to make sure safe work orders are carried out. Other meetings in the series will include the subjects "Horsepower and Horse Sense," "Men—Monkeys or Elephants?," "Fire Prevention and Good Housekeeping" and "Getting Safety Across."

Special guests at the initial sessions were Regis Dean and Charles Miller of the U. S. Corps of Engineers for which Dravo is constructing the river lock at Braddock, Orvahl, general superintendent of Dravo's Contracting Division, served as chairman.

Smooth Ceiling Systems

A new 8-page bulletin shows Smooth Ceiling Systems, manufactured by Smooth Ceiling Systems, Minneapolis, Minn., used in numerous types of buildings.

This system employs a special steel grillage that eliminates flared column capitals, drop panels, and beams, which greatly reduces construction costs.

In addition to showing various types of buildings in which Smooth Ceiling Systems may be used, the bulletin also shows test slabs with the results of various test loads.

Link-Belt, Chicago, Promotes Berg and Moyer

Link-Belt Co., Chicago, Ill., recently announced that Eugene P. Berg, formerly general superintendent, has been appointed to the newly created position of assistant general manager of the Link-Belt Pershing Road plant in Chicago which is devoted to the design and manufacture of coal preparation plants, materials handling, elevating and conveying installation, dryers, car shakers, car dumpers, grain car unloaders, and that Richard Moyer, formerly superintendent of the steel shop, has been appointed general superintendent, manufacturing department.

Mr. Berg, a mechanical engineering graduate of Purdue, began his Link-Belt career by working in the Pershing Road shop during vacations from 1929 to 1937. He has successively served as supervisor of the methods department at Pershing Road, general foreman of the structural steel shop; works manager at the company's Philadelphia plant, and general superintendent at Pershing Road since 1947.

Mr. Moyer was educated at Williamson Trade School and the University of Chicago, and entered the employ of the Pershing Road plant in 1937. He successively worked in the power plant, maintenance tool room; machine shop, and held various important positions at Link-Belt Ordnance Co. during the war. He returned to the Pershing Road plant in 1945 as superintendent to the machine shop, and later in that year was appointed superintendent of the steel shop.

Lo-Head Crane Block

The Lo-Head crane block manufactured by the American Hoist and Derrick Co., St. Paul, Minn., is described in Catalog No. 30-16.

Lo-Head is a compact, heavy-duty crane block that was designed and built with an extremely short overall length. It is available from stock in capacities from 10 to 50 tons, one, two or three sheaves, 18" to 24" diameters.

Special features include: an attachment for rope dead end, hyatt hi-load sheave bearings, rugged cast steel cheek weights, hook and axle close to center of gravity of block, hook bearing timken tapered roller bearing, cast steel sheaves for maximum life, alomite grease fittings for easy lubrication, separate channels to each sheave bearing, forged steel hook swivel hanger and forged steel hook.

Electronic Accelerator Speeds Elevator Travel

Engineers of the Westinghouse Elevator Division, Jersey City, N. J., have developed sensitive vacuum tube devices to accelerate the automatic dispatching of high-speed elevators. These electronic circuits transmit thousands of split-second impulses every hour directing and spacing elevator cars so that they will be where people want them at the right time.

The robot timer is one of the new developments which serves as the core of the dispatching system, and immediately signals the departure of cars from the top or bottom terminal at regular intervals. This interval is varied automatically in keeping with demand, between 20 and 40 seconds. Heart of the timer is a vacuum tube that "fires" periodically and in so doing signals one car to start and another to get ready. This device replaces a motor-driven timer that required manual settings and adjustments, as well as the use of relays for each bank of six elevator cars.

Another addition is the electronic counter which insures adequate service for lower floors of a building at a time when some of the cars normally serving the lower floors have been temporarily transferred to help out in the upper floors. The Selectomatic control system splits a bank of elevators into two groups, one to serve lower floors and the other, upper floors. The control adjusts automatically to varying traffic conditions, so that when there is an unusually high number of calls for service in the upper floors, lower zone cars will be speeded to help meet the demand.

"For the Land's Sake"

International Harvester Co., Chicago, Ill., has recently issued a new pamphlet describing the leading role of industrial equipment and earthmoving tractors in the nationwide battle to protect, improve and expand America's productive farm and range lands. It describes the background and scope of the vital soil conservation-reclamation movement and presents a news-feature style report on latest techniques and tools used to meet the problems of erosion, invading brush and expanding irrigation activities with tractors and other industrial machines.

Action photos of International tractors on the job illustrate various operations involved in soil saving. Clearing, raking, chopping, chain dragging and deep-plowing mesquite and other woody growths; building terrace-and-waterway protective systems; leveling and grading land for irrigation, and other phases of the work are shown. Brief captions give job details, costs and owner reports of tractor performance.

Selection of Cable Sizes

"Selection of Proper Cable Sizes" is the title of a new booklet just issued by General Electric's Construction Materials Advertising Department, Bridgeport, Conn. This publication deals with the method of determining cables and cable sizes of asbestos-varnished cambric cables, Types AVA, AVB, and AVL. Step-by-step instruction is given on figuring load current, voltage drop, cable and cable sizes for both lighting and motor loads. Handy reference tables simplify these computations.

Vitrified Liner Plates

A 6-page pamphlet dealing with the proper installation of vitrified clay liner plates has recently been released by the Robinson Clay Product Co., Akron, Ohio, as an aid to construction engineers and contractors. Joining, bonding and anchoring of clay liner plates for concrete pipe and manholes, sewers, drains, sewage treatment tanks and other projects are discussed in detail.

End Dump Burden Carrier Truck

The Mercury Manufacturing Co., Chicago, Ill., announces design and production of a new battery powered electric end dump burden carrier truck. The body dumps by gravity when released by means of a lever convenient to the operator's position and returns to level latched position when emptied. The body capacity is one and one-half cubic yards and the truck load capacity is rated at 6,000 pounds. The truck chassis retains all of the design features of Mercury lift truck—four wheel drive type steering, double rear wheel drive axle, semi-elliptic spring suspension, and mechanical contractor travel controller. Model designation is A-1015-9.

Walker to Manage Mack Truck Division

R. W. Walker, Mack-International Motor Truck vice president, has been named manager of the company's newly created eastern division, a territory representing the consolidation of three of the company's major east coast sales divisions. In his new post Mr. Walker will direct all Mack truck, bus and fire apparatus sales and service activities through the 17 direct factory branches maintained by the company throughout New York State and northern New Jersey.

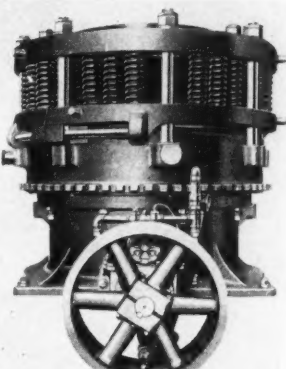
Six Appointments Are Announced by Nordberg

Six new distributor appointments for the new Nordberg 4FS-1 Diesel Engine are announced by Harry M. Cahill, sales manager, Smith Engine Department, Nordberg Manufacturing Co., Milwaukee, Wis.

These appointments are: J. N. Vernam Co., Miami, Fla.; Al-Pac Engine & Equipment Co., Seattle, Wash.; Atlantic Engine Supply, Inc., Boston, Mass.; Bolinders Co., Inc., New York, N. Y.; H. G. McKinney & Co., Wilmington, Calif.; and Northwest Distributors, Ltd., Vancouver, B. C., Canada.

The Nordberg Model 4FS-1 Diesel engine is a single cylinder, 4 1/2 x 5 1/2-inch, unit rated at 15HP at 1800 RPM and 10HP at 1200 RPM. This extra heavy-duty vertical type Diesel engine is designed for stationary and portable power, and has applications in pumping, blower, and power units for belt or chain drive or direct connection.

New Telsmith Gyrasphere



Telsmith Gyrasphere Crusher.

Smith Engineering Works of Milwaukee, Wisc., has announced two new models of the Telsmith Gyrasphere crusher—the Style S Standard Gyrasphere and the Style FC Fine Crushing Gyrasphere. They include many new improvements, incorporated after several years of testing in actual service, which give greater capacity, a more uniform, cubical product, and a lower crushing cost per ton.

In Style S Standard Gyrasphere, larger roller-thrust bearings are now located at the top of the eccentric and transmit crushing pressures from the bottom of the head directly into the main frame. A longer crushing stroke gives greater capacity. The eccentric bearings have more bearing area in the upper zone of greatest crushing pressures. Longer springs are used, to pass larger pieces of tramp iron. The main drive gear is located at the bottom of the eccentric instead of at the top, assuring more perfect and more permanent alignment of gears and longer life for these parts. The model is more accessible for maintenance purposes. It is available in the 24-inch, 36-inch and 48-inch sizes with either coarse or medium bowl.

Style FC Fine Crushing Gyrasphere has the same structural improvements as the Style S, plus several additional fine crushing features. It comes equipped with a new Feed Distributor, for even feeding and a more uniform product. It has more springs to handle greater crushing pressures. Style FC has a different shape of mantle and concave with a longer parallel crushing zone to give a finer product. New Gun-Lock type mantle and concave holding devices are automatically self-tightening and make these parts easier to change. It is also available in the 24-inch, 36-inch and 48-inch sizes with either medium or fine bowls. The photograph shows one of the new Telsmith 48-inch Style FC fine crushing Gyraspheres. Catalog #274 describes and illustrates these two new Telsmith Gyrasphere crushers.

Plaster and Mortar Mixer

A new three-cube-foot capacity plaster and mortar mixer is announced by Muller Machinery Co., Metuchen, N. J. Although designed particularly for the small mason contractor, it is convenient for use on larger jobs where the mixing operation is decentralized to save time in handling mixed materials. Its low charging height of 32 inches and width of 29 1/2 inches make it particularly convenient for inside use, going through a 30-inch doorway without altering wheels.

Powered by a Model 9-R-6 Briggs and Stratton air cooled engine, it is driven through a roller chain and machine cut gears. Engine house is split for accessibility to driving mechanism. Tires are 4.00 x 8 on disc wheels with roller bearings. Also supplied with a one-horsepower electric motor for plugging in a light socket for inside use.

Davis Sales Executive

Russell G. Davis is a newly appointed sales executive of Chain Belt Co. of Milwaukee, Wis. It was announced recently by A. R. Abelt, vice president in charge of field sales forces.



Above—The new L-Line announced by the Motor Truck Division of International Harvester Co. includes 87 separate truck chassis models. Among them are: Top—the Loadstar Model L-184, g. v. w. 21,500 pounds; Next—Loadstar Model L-194, g. v. w. 25,500 pounds; Third—Loadstar Model L-204, g. v. w. 29,500 pounds; Standard Model L-211, g. v. w. 34,000 pounds; Roadliner Model L-225, gross weight rating, 60,000 lbs.

International Harvester Unveils Its New "L"-Trucks With 87 Chassis Models

A COMPLETELY re-designed and re-engineered line of International trucks, entirely new from front bumper to tail light, has been announced by the Motor Truck Division of International Harvester Co. Known as the new L-line, it consists of 87 separate truck chassis models designed to handle every conceivable type of hauling job.

End result of International's 43 years of truck engineering know-how, the new line features:

Restyling that blends a new streamlining with practicability.

"Comfo-Vision" cab, to provide more roominess, added comfort and all-round visibility.

Chassis dimension engineering that permits better load distribution, greater maneuverability, shorter over-all lengths and improved engine accessibility.

Valve-in-head International truck series engines, including an all-new Silver Diamond engine.

More than \$30,000,000, greatest for any new models in the company's history, was spent for the vast production changeover which involved widespread revamping of facilities, layouts and assembly lines in the company's Fort Wayne and Indianapolis, Ind., and Springfield, O., plants; acquisition of thousands of new machines, tools, dies, patterns, gauges and fixtures, and addition of many new building and extensions to existing facilities.

More than three years of road tests went into proving the new trucks. The intensive program included laboratory and track testing in addition to over 3,000,000 miles of driving under all types of operating, weather and road conditions.

The new L-line is spearheaded by four classifications of four-wheel model trucks—the Standard, ranging from 4200 pounds to 40,000 pounds, gross vehicle weight; the Schoolmaster, comprising five bus models ranging from 12,500 to 24,000 pounds; GVW; the Loadstar, ranging from 16,500 to 29,500 pounds, GVW, and the Roadliner, ranging from 16,000 to 30,000 pounds, GVW.

The new International line further features new Metro multi-stop units, product of the company's Bridgeport, Conn., plant, ranging from 5300 to 10,000 pounds, GVW, and including three different body sizes, one adaptable for use as a bus; a new group of six-wheel chassis units, ranging from 22,000 to 50,000 pounds, GVW; a new group of cab-forward chassis units, ranging from 14,000 pounds, GVW.

The company's "West Coast" trucks, manufactured in International's Emeryville, Cal., plant, include two highway and four off-highway vehicles, ranging from 30,000 to 90,000 pounds, GVW.

The new L-line presents a completely new design in motor trucks, at once apparent from the massive front end to the smartly styled cab. The modern appearance

achieved is the result of combining beauty of line with a utility that permits more roominess, added driver comfort and convenience, increased safety and new all-around visibility—factors which result in greater operator efficiency and thus spell more profitable truck operation.

International's completely re-designed "Comfo-Vision" cab is more roomy than ever before. It measures 58½ inches wide by 51 5/16 inches high by 58 3/16 inches long inside. Head room measures 37½ inches to 38½ inches, depending on the model; leg room, 44½ inches to 45½ inches; elbow room, 8 inches to 9½ inches. Seat adjustment is 4 inches. Knee room ranges from 17¼ to 19 inches, depending on the model. The curved contour instrument panel further adds to cab-room and occupant-comfort. "Cushion comfort" is emphasized. A one-piece "Sweepsight" windshield is curved to reduce eye-strain.

Dimensions of the chassis of the new L-line have been engineered to provide better load distribution, greater maneuverability, shorter overall lengths and improved engine accessibility. Biggest change is in the wheel bases, which have been shortened as much as seven inches in some models. The shorter wheelbases, together with re-proportioned cab-to-rear axle dimensions and front-axle-to-cab dimensions, have resulted in a shifting of load weight, so that it is in balance between front and rear axles.

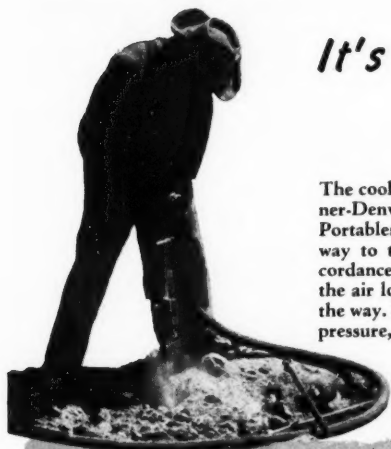
Better maneuverability results from the shorter turning radius. The turning angle on practically all models throughout the line has been increased to a minimum of 37 degrees. Rearrangement of chassis dimensions in the L-line has been made without sacrificing engine accessibility. While the cab has been moved forward, a special cowl design makes it possible to open up more space between engine and cowl, so that the engine is actually more accessible than in the past.

The new Silver Diamond engine, used in the company's light and medium-duty trucks, is a valve-in-head, six-cylinder power plant and is built in two sizes—the 220 cubic-inch displacement size at 100 horsepower and the 240 cubic-inch displacement size at 108 horsepower. Each has a compression ratio of 6.5 to 1. Buoyant power engine mounting, an exclusive feature, with live-rubber cushioning, suspends the engine at three points for smoother, quieter power flow and longer engine life.

The International Blue Diamond truck engine, long proved one of the best balanced truck engines, is succeeded by Super Blue Diamond, retaining all the fine features and incorporating many refinements and many improvements.

The Super Blue Diamond has a displacement of 269 cubic inches and a horsepower of 100.5. Compression ratio is 6.3 to

(Continued on page 44)

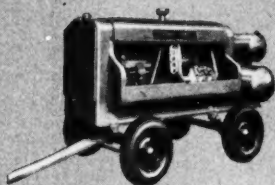


It's the pressure at the tool that counts!

The cooler air discharged from Gardner-Denver Two-Stage, Water-Cooled Portables has less heat to lose on the way to the tool. Therefore—in accordance with basic laws of physics—the air loses less of its pressure along the way. It reaches the tool at a higher pressure, and this vigorous air pres-

sure lets every tool work at full capacity—full speed—full efficiency.

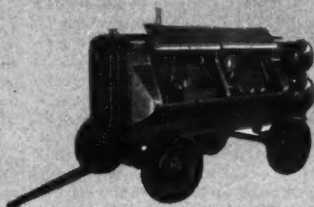
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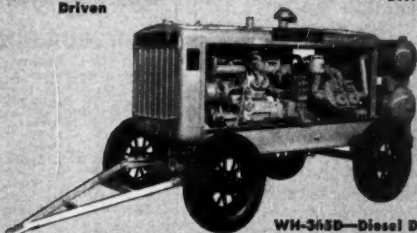
WH-210—Gasoline or Diesel Driven



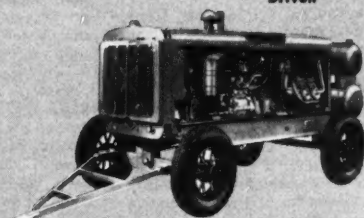
WH-105—Gasoline or Diesel Driven



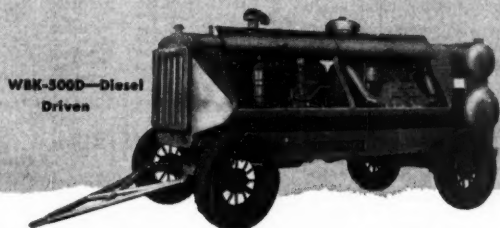
WH-315—Gasoline or Diesel Driven



WH-363D—Diesel Driven

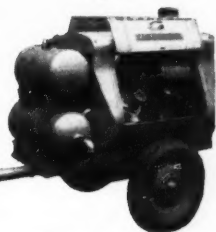


WH-430D—Diesel Driven



WBK-500D—Diesel Driven

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South's Contracts at Record Level

(Continued from page 9)

tions totaled \$41,000,000 in November. This was twenty-seven per cent above the total for October. Industrial construction was the only category that dropped in November. The \$22,086,000 was down twenty per cent.

National predictions on next year's prospects are that it will equal the expected current total of \$19,000,000,000 for put in place construction. Private construction outlays will drop about \$925,000,000, says the Office of Domestic Commerce and Bureau of Labor Statistics, which joined in further forecasting that public expenditures will probably increase to absorb the slackening of private work.

Total value of private construction, as seen by the two federal agencies, will probably be about \$13,100,000,000, or seven per cent less than the value anticipated for 1949, the ultimate total for which is now expected to be about \$14,000,000,000 because of a record volume of housing construction during the last half of the year.

Nearly 1,000,000 new non-farm dwelling units will have been started in the country by the close of the current year, says the joint announcement. In 1950 the number of starts is placed at about 900,000, a figure that is less than in previous peak years such as 1925 when the number of starts totaled 937,000, in 1948 with its 931,000 units in 1949.

Private housing will account for approximately 830,000 units, as compared with the nearly 960,000 of this year and the 913,500 in 1948. From 60,000 to 80,000 new units are expected to be started under provisions of the Housing Act of 1949.

The outlook, according to the Labor Statistics Bureau and Domestic Commerce Office, is for a decrease in 1950 in most types of private non-residential building, except for commercial buildings which may increase slightly as a result of shopping facilities required to serve new residential areas. A substantial increase in hospital and institutional building is forecast under the national hospital program.

Construction of new industrial plans and facilities is expected to drop about twenty-six per cent, continuing a downward trend that has marked 1949 as postwar expansions are finished. Also lower will be the volume of new churches, social and recreational facilities and other types of non-residential buildings.

Farm construction probably will continue to ease off, following the trend of farm income. However, the Farmers Loan \$27,000,000 is now pushing programs by which funds will be available for such work. These projects, however, individually are of a minor nature, the largest loan being \$1,000. Maryland has \$304,760 available for such work.

Privately owned public utilities are predicted to be planning less new construction for next year. Gas companies may increase their outlays, following the current trend to construct long trans-

mission routes and shorter connecting lines to substitute natural gas for the manufactured variety.

Public construction put in place in 1950 is expected to exceed \$6,100,000,000, an increase of nearly eighteen per cent over the probable \$5,200,000,000 total for 1949. Expenditures in all categories except for military and naval facilities will probably be larger.

Eighty per cent more expenditures for public residential construction may result from activities under the Housing Act of 1949. The outlook for a larger volume of new schools, hospitals and public administration buildings will produce about fourteen per cent increase in public non-residential buildings.

Highway construction will advance about fifteen per cent in dollar volume, reaching about \$1,900,000,000 in 1950. Municipalities are expected to expand sewer and water programs and public utilities to serve growing communities and the federal government will spend larger amounts for rivers, harbors and flood control, as well as for reclamation work.

On the subject of construction costs, the Labor Bureau-Commerce Office view is that they will remain relatively stable in 1950, perhaps at about the level prevailing in the last half of this year. Adequate supplies of construction materials will be available for the anticipated volume. Some steel shortages may occur early in the year. The labor supply should be adequate.

The Labor Statistics Bureau index of wholesale prices, which sets the year of 1926 at 100, shows figures as follows for building materials: Brick and tile, 161.8; cement, 133.6; lumber, 279.6; paint and paint materials, 143.9; plumbing and heating requirements, 154.6; structural steel, 178.8. Other building materials are grouped in an index of 168.9 for such commodities as cast iron pipe, pine doors, gravel, plaster, sand and plaster board.

The index for all building materials was 189.4 per cent of the 1926 level. This representing an advance of about six-

(Continued on page 44)

ROADS, STREETS, BRIDGES

	November, 1949	Contracts Awarded	First Eleven Months, 1949
	Contracts Awarded	Contracts to be Awarded	
Ala.	\$ 96,000	\$ 1,760,000	\$ 4,568,000
Ark.	1,113,000		7,681,000
D. C.	58,000	360,000	4,376,000
Fla.	6,345,000	1,710,000	16,614,000
Ga.	5,301,000	1,775,000	23,361,000
Ky.	986,000	3,110,000	33,658,000
La.	4,754,000	12,155,000	35,943,000
Md.	7,798,000	10,634,000	74,087,000
Miss.	226,000	240,000	12,438,000
Mo.	2,155,000	21,222,000	18,758,000
N. C.	2,157,000	2,340,000	24,383,000
Okla.	1,755,000	13,461,000	23,119,000
S. C.	559,000	1,231,000	18,173,000
Tenn.		2,800,000	12,113,000
Texas	4,630,000	6,187,000	104,311,000
Va.		3,950,000	33,299,000
W. Va.	3,077,000	500,000	11,804,000
TOTAL	\$41,000,000	\$83,468,000	\$449,117,000

PUBLIC ENGINEERING

(Dams, Drainage, Waterworks, Sewers, Etc.)

	November, 1949	Contracts Awarded	First Eleven Months, 1949
	Contracts Awarded	Contracts to be Awarded	
Ala.	\$ 4,788,000	\$ 4,225,000	\$ 9,286,000
Ark.	2,010,000	2,651,000	11,191,000
D. C.	236,000	8,970,000	1,495,000
Fla.	369,000	7,540,000	23,474,000
Ga.	312,000	2,575,000	12,681,000
Ky.	5,659,000	1,110,000	12,893,000
La.	3,350,000	4,107,000	43,110,000
Md.	1,093,000	6,380,000	14,528,000
Miss.	377,000	3,300,000	16,758,000
Mo.	4,830,000	4,025,000	20,469,000
N. C.	1,214,000	1,419,000	13,352,000
Okla.	1,971,000	2,167,000	19,192,000
S. C.	917,000	1,790,000	11,154,000
Tenn.	4,119,000	108,461,000	23,670,000
Texas	10,850,000	45,654,000	88,472,000
Va.	611,000	1,650,000	18,285,000
W. Va.		500,000	3,085,000
TOTAL	\$44,906,000	\$263,921,000	\$348,695,000

PRIVATE BUILDING

(Assembly, Commercial, Residential, Office)

	November, 1949	Contracts Awarded	First Eleven Months, 1949
	Contracts Awarded	Contracts to be Awarded	
Ala.	\$ 3,997,000	\$ 3,805,000	\$ 22,969,000
Ark.	301,000		2,768,000
D. C.		1,125,000	4,725,000
Fla.	14,370,000	16,822,000	141,840,000
Ga.	4,145,000	13,511,000	40,174,000
Ky.		2,000,000	10,415,000
La.	3,697,000	15,793,000	52,963,000
Md.	25,811,000	3,795,000	105,227,000
Miss.	3,011,000	535,000	21,618,000
Mo.	3,332,000	885,000	28,752,000
N. C.	6,346,000	7,881,000	48,486,000
Okla.	664,000	805,000	13,832,000
S. C.	965,000	14,618,000	17,905,000
Tenn.	2,444,000	8,875,000	26,901,000
Tex.	21,544,000	47,420,000	290,167,000
Va.	1,834,000	15,185,000	14,306,000
W. Va.		2,000,000	518,000
TOTAL	\$92,361,000	\$161,891,000	\$843,701,000

PUBLIC BUILDING

(City, County, State, Federal; Hospitals; Schools)

	November, 1949	Contracts Awarded	First Eleven Months, 1949
	Contracts Awarded	Contracts to be Awarded	
Ala.	\$ 2,121,000	\$ 4,555,000	\$ 35,671,000
Ark.	637,000		29,371,000
D. C.	5,027,000	1,170,000	49,192,000
Fla.	1,969,000	17,342,000	34,786,000
Ga.	2,665,000	5,940,000	25,570,000
Ky.		2,130,000	29,607,000
La.	13,216,000	7,913,000	66,496,000
Md.	3,673,000	7,929,000	61,117,000
Miss.	1,619,000	7,720,000	29,932,000
Mo.	1,017,000	5,530,000	22,549,000
N. C.	3,620,000	12,942,000	33,322,000
Okla.	2,367,000	2,542,000	24,103,000
S. C.	1,784,000	9,215,000	14,336,000
Tenn.	3,710,000	7,300,000	42,720,000
Texas	18,024,000	35,910,000	136,116,000
Va.	4,627,000	7,584,000	47,377,000
W. Va.	1,117,000	4,687,000	5,237,000
TOTAL	\$67,213,000	\$159,760,000	\$677,108,000

INDUSTRIAL

	November, 1949	Contracts Awarded	First Eleven Months, 1949
	Contracts Awarded	Contracts to be Awarded	
Ala.	\$ 151,000	\$ 8,400,000	\$ 6,500,000
Ark.	3,203,000	1,145,000	36,395,000
D. C.			
Fla.		600,000	13,567,000
Ga.	2,150,000	1,370,000	8,534,000
Ky.	250,000	510,000	10,754,000
La.	2,769,000	17,260,000	33,364,000
Md.	951,000	550,000	18,525,000
Miss.	263,000	2,576,000	21,289,000
Mo.	1,345,000	26,600,000	6,045,000
N. C.	1,104,000	11,932,000	27,925,000
Okla.	694,000	1,200,000	8,220,000
S. C.	24,000	5,390,000	31,927,000
Tenn.	345,000	19,350,000	100,852,000
Texas	7,076,000	72,450,000	109,384,000
Va.	586,000	125,000	3,364,000
W. Va.			1,550,000
TOTAL	\$22,086,000	\$169,061,000	\$441,281,000

~~SMOOTH~~ OPERATION

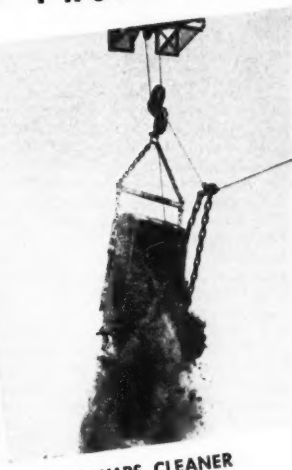
NO LOSS OF TIME . . . BIGGER PROFITS



FILLS FASTER



FULL PAY LOAD EVERY TIME



DUMPS CLEANER

Switch to a **HENDRIX!**

THREE TYPES
FOR EVERY
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 $\frac{3}{8}$ to 40 Cu. Yds.

HENDRIX
Lightweight
**DRAGLINE
BUCKETS**

Combining rugged construction, larger capacity and perfect balance, HENDRIX DRAGLINE BUCKETS give s-m-o-o-t-h performance and low maintenance cost. These features mean BIGGER PROFITS to the dragline operators who have already switched to HENDRIX BUCKETS. These buckets make for top-notch operation and have proved their ability to dig more dirt at lower cost. Hendrix Buckets have proved themselves in the field . . . their performance, long-life, and low maintenance cost have resulted in bigger profits on every job. Hendrix Buckets are tough . . . they're made to take it!

For descriptive literature ask your dealer
or write

HENDRIX MANUFACTURING CO., INC.

MANSFIELD — LOUISIANA

L-Line Trucks Unveiled

(Continued from page 40)

1. In addition to the many proved features retained from the Blue Diamond, the Super Blue Diamond has added numerous engineering refinements, including: Stellite-faced valves, Durachrome heat-treated valve inserts; a more efficient crank case ventilating system; an improved lubrication system, more economical oil consumption, and deep-well tappet fittings.

The Red Diamond engine now embraces advanced engineering refinements to make its successor, the Super Red Diamond engine, one of the most outstanding power plants in the truck industry. The Super Red Diamond is available in three sizes. The 372 cubic-inch displacement size develops 144 horsepower; the 406 cubic-inch displacement size, 154 horsepower; the 450 cubic-inch displacement size, 162 horsepower. Compression ratio is 6.3 to 1.

Among the many new features on the Super Red Diamond engine are an outside air intake on the carburetor; larger carburetors, intake ports and manifolds; slo-roto exhaust valves; a new fuel-saving combustion chamber design, and thin replaceable piston sleeves.

The L-line offers a complete selection of transmissions to meet every hauling requirement. Main transmissions available include two sizes of 3-speed Synchro-shift; a 4-speed sliding gear; a new 4-

tenths of one per cent the first in eight months. Lumber price rises were given as the reason. The 1894 figure was 7.2 per cent below the peak of September 1948 and 54.8 per cent above the June 1946 level. Declines in prices of western softwoods were more than offset by increases in yellow pine, red cedar shingles and siding, Douglas fir flooring and drop siding.

From private industry comes an optimistic note. W. C. Schumacher, general manager of the truck division of the International Harvester Co., last month said the demand for motor trucks is one of the most accurate barometers of general economic trends and that accelerated retail deliveries of such vehicles this year compare favorably with record sales of

spread Synchro-shift; four sizes of heavy-duty, 5-speed constant-mesh, with direct or overdrive in fifth, and 5-speed Synchro-shift, with direct or overdrive in fifth.

Wider, sturdier rear axles, engineered to handle any job, are available in the new models. Hypoid single-speed, double reduction and two-speed with electric shift are included in the line. Hypoid axles, introduced in the L-line, provide longer life, greater torque transmitting capacity and quieter final-drive operation.

In International's Steel-flex frame construction great strength has been com-

last year and "give every indication that demand will continue to be heavy during 1950."

Making his statement at one of the previews held throughout the country prior to announcement of the new International L-line, Mr. Schumacher revealed that sales of trucks this year should reach the million mark and thus again break all pre-war records. "This high rate of sales portends a bright outlook for American economic conditions in general," he pointed out, "because motor trucks carry such a large bulk of the outpourings of goods from the nation's factories, their rate of replacement, as reflected in retail deliveries, is looked upon by many analysts as a real bellwether of economic conditions."

bined with the correct flexibility factor to provide a frame that stands up better under heavy loads and rough roads.

Sturdy crossmembers—five in light trucks, six in mediums and seven in heavies—are cold-riveted to the deep, pressed steel channel siderails. A heavy channel-type bumper is mounted directly to the frame. The longest, strongest springs in International history cushion the load and driver in the new trucks. Semi-elliptic rear springs are shackled at the rear with brackets cold-riveted to the frame.

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Southern Construction Projects

TENNESSEE

(Continued from page 26)

storage tank, grade approximately 5 mile of roadway in Paris Landing Park Area, Kentucky Lake, \$200,000.

POLK COUNTY—Polk County Commissioners plans Old Fort School, gymnasium.

ROGERSVILLE—City let contract to Roy Payne Co., Chattanooga, \$262,000 for water system.

TEXAS

TEXAS—Brazos River Conservation & Reclamation District, Mineral Wells, has tentative plans for financing approved by Board of Directors, for three (3) power dams, in Hood County, one at Inspiration Point south of Mineral Wells, in Palo Pinto County, \$25,000,000.

TEXAS—State Highway Commission, Austin, received low bids for projects in following counties:

Hamilton—Proj. No. S-506(2), FM 220, 9.629 mi. grad., struc., found. crse. & sgl. asph. surf. treat.; Wesley Hall, Brownwood, \$75,334.

Borden—Proj. No. R-558-2, 2.480 mi. grad., struc. flex. base & sgl. asph. surf. treat.; Ernest Loyd, Fort Worth, \$47,947.

Terry—Proj. No. S-146(1), 9.261 mi. grad., struc. stab. found. crse. and dbl. asph. surf. treat.; \$52,644 and Carl R. Hart, Brownfield, Engr.

Falls and Limestone—Proj. No. S-1071(2) & (3), 11.019 mi. grad., struc. flex. base & sgl. asph. surf. treat.; H. L. Butler & Son, Dallas, \$119,253.

Reagan and Crockett—Proj. No. S-1193 (1&2), 20.220 mi. grad., struc. flex. base & dbl. asph. surf. treat.; M. E. Ruby & W. L. Barnes, San Marcos, \$124,989.

Gonzales—Proj. No. V-1133-2-1, 11.592 mi. grad., struc., roadbed treat. & sgl. asph. surf. treat.; T. C. Cage & Dean Skinner, Austin, \$87,929.

Tyler—Proj. No. S-1327(1) & S-1328(1), 14.439 mi. grad., struc. flex. base & sgl. asph. surf. treat.; Campbell & Kay, Tyler, \$194,576.

Bee and Live Oak—Proj. No. S-1283(1), S-1283(2), 18.071 mi. grad., dr. struc., flex. base & sgl. asph. surf. treat.; Thomas & Ratliff, Rogers, \$119,951.

Presidio—Proj. No. S-1407(1), 2.879 mi. grad., struc., flex. base & dbl. asph. surf. treat.; Hugh McMillan, El Paso, \$36,921.

Orange and Jefferson—Proj. No. F1-35(3) & F1-56(2), 3.955 mi. hydraulic embankment, U. S. 90; Jahncke Service, Inc., New Orleans, La., \$847,235.

TEXAS—State Highway Commission, Austin, received low bids for projects in following counties:

Mason—Cont. No. 71-3-9, Fed. Proj. No. F-293(3), 7.332 mi. grad., str., etc.; T. C. Cage, 607 Travis Bldg., San Antonio and Dean Skinner, P. O. Box 4057, Austin, \$222,961.

Deaf Smith—Cont. No. 1243-1-1, Fed. Proj. No. S-1309(1), 36.357 mi. grad., str., etc.; New Mexico S. L. to St. Hwy. 51 in Hereford; J. R. Fanning, 1712 13th St., Lubbock, \$419,614.

Real—Cont. No. 554-2-1 & 2&3, Fed. Proj. No. S-1363(1), R-554-2-2, S-1363(2), 7.518 mi. grad., dr. str., etc.; Strain & Brown, Inc., P. O. Box 1057, San Angelo, \$57,843.

Hidalgo—Cont. No. 669-1-2 & 1227-4-1, Fed. Proj. No. 1444(1) & S-1445(1), 12.846 mi. grad., str., and asph. surf. treat., etc.; H. B. Zachry Co., P. O. Box 2570, San Antonio, \$72,492.

Correll—Cont. No. 1187-1-1, Fed. Proj. No. S-1190(1), 9.919 mi. grad., struc. and crse., asph. surf. treat., etc.; North of Gatesville to Correll; Wesley Hall, Rt. 1, Box 260, Brownwood, \$75,051.

Galveston—Proj. No. V-978-1-4, C-978-2-2 & C-978-2-2, 1.232 mi. grad., str., shell crse. base, rock asph. pave., etc.; The Austin Road Co., P. O. Box 1590, Dallas, \$207,030.

Cooke—Cont. No. 823-2-1, Fed. Proj. No. S-1218(1), Hwy. FM 373, 5.217 mi. grad., dr. str., flexbase, surf. treat., etc.; Ernest Loyd,

P. O. Box 1120, Fort Worth, \$45,792.

TEXAS—State Highway Commission, Austin, received low bids for projects in following county:

Bosque—Cont. No. 398-1-4 & 724-2-4, Fed. Proj. No. S-166(2) & S-507(3), 2.099 mi. bridge & approach; J. R. Fanning, 1712 13th St., Lubbock, \$166,651.

ALDINE—Aldine Independent School District, has plans in progress for gymnasium and elementary school, \$150,000.

AUSTIN—Von Boeckmann-Jones Co., let contract to Leslie F. Crockett Construction Co., 112 Academy Drive, \$126,299 for one-story buildings for printing office and shops.

AUSTIN—State, Allan Shivers, Gov., plans erection of State Police headquarters building in North Austin, on the Dallas-Fort Worth Highway, \$1,000,000.

AUSTIN—University of Texas, Board of Regents, has final plans near completion for three-five-story classroom buildings, \$2,948,000.

AUSTIN—City received low bid from Collins Construction Co., 2821 E. 19th St., \$837,385, for street paving.

AUSTIN—St. Stephens Episcopal School plans in progress for school, Chautauqua Hill, \$250,000.

BAIRD—Callahan County Water Control & Improvement District No. 1, has plans in progress for Earthen Dam, \$175,000.

BANQUETTE—Banquette Independent School District plans gymnasium and cafeteria; \$195,000 bond issue voted.

BAY CITY—City sold \$600,000 bond issue to B. V. Christie & Co., & Associates, for water and sewer improvements.

BEAUMONT—M. L. Lefler, Jr., let contract to Holliday Constr. Co., for 200-unit apartment, \$1,000,000.

BEAUMONT—Beaumont Country Club, has plans nearing completion, for addition and remodeling of club bldg., \$200,000.

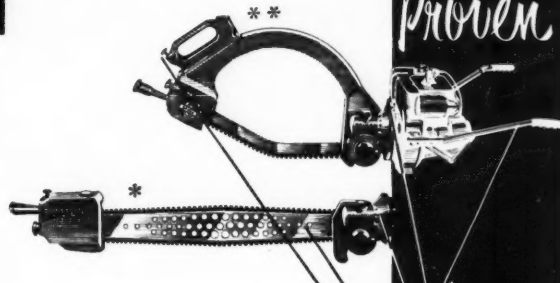
BELTON—Bell County received low bid from Harold O. Eltze Construction Co., P. O.

(Continued on page 46)

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Southern Construction Projects

TEXAS

(Continued from page 45)

Box 3034, Austin, \$211,633 for alterations and remodeling of present four-story Courthouse; Westinghouse Electric Corp.

BOXHAM—Fannin County Commissioners Court approved program including 22.1 mi. farm-to-market roads, \$318,750.

BROWNSVILLE—Mercy Hospital, Mrs. L. F. Lightner, has plans completed for new wing, \$829,000.

BROWNSVILLE—Public Buildings Administration, Washington, D. C., has plans under consideration for new Border Station, \$650,000.

CORPUS CHRISTI—City and Nueces County plans addition to Memorial Hospital, \$900,000.

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CORPUS CHRISTI—Kaffie Lumber and Building Co., will erect store and office bldg., \$175,000.

CORSICANA—Housing Authority plans 200 unit housing project, \$1,500,000.

CORSICANA—Navarro County to have plans complete about January 1, for 100-bed hospital, \$1,200,000.

DALLAS—Bryan-Bullington Corp., has construction underway for 10-story office building, \$2,325,000.

DALLAS—Dallas Independent School District let contract to T. C. Bateson Construction Co., Irwin-Keasler Bldg., \$542,600 for Forrest Avenue High School.

DALLAS—Highland Park Independent School District let contract to J. L. O'Rourke & Son, 707 Clermont, \$258,000 for addition to Highland Park High School.

DALLAS—City let contract to A. J. Rife Construction Co., P. O. Box 7086, \$275,888 for hangar, shops, administration building, paint and dope shed, sidewalks, paving and fencing for Love Field Municipal Airport.

DALLAS—Highland Park Independent School District let contract to A. J. Rife, 2608 Inwood Rd., \$171,162 for Hyer Elementary and Highland Park Junior High Schools to O'Rourke Construction Co., 1901 Commerce St., Dallas, \$273,500.

DALLAS—Securities and Exchange Commission, Washington, D. C., granted Texas Utilities Co., authority to make loans amounting to \$15,000,000 to subsidiaries, Texas Electric Service Co., Fort Worth, and Texas Power & Light Co., Dallas; loans to be used for construction purposes.

DALLAS—First Baptist Church, has plans in progress for building, \$500,000.

DALLAS—Dallas Independent School District sold \$8,000,000 bond issue to syndicate managed by First National Bank, for school building program.

DALLAS—Edward Dicker, Magnolia Bldg., will build Dorchester House apartment bldg., Gaston & St. Joseph Sts., \$1,500,000.

DALLAS—Dallas Independent School District let contract to Vivrett and Vivrett, Southland Life Bldg. Annex, \$585,085 for Preston Hollow School.

DALLAS—Church of Christ, has plans nearing completion for building, \$300,000.

DONNA—Donna Independent School District has plans in progress for school improvements, \$250,000 bond issue voted.

DENISON—Corps of Engineers has allocation of \$437,000 for recreational facilities at Lake Texoma.

DONNA—Donna Independent School District has plans nearing completion for addition near the present junior high school building and seven room addition to East Donna Elementary School; \$200,000 bonds voted.

EDNA—Jackson County has plans in progress, Courthouse, \$500,000.

ELDORADO—Schleicher County Independent School District let contract to Von Frelliek, Inc., P. O. Box 209, San Angelo, \$288,400 for new high and elementary school, alterations and repairs to existing elementary school.

EL PASO—Board of Directors received low bid from Robert E. McKee, 1918 Texas St., \$2,227,300 for 272-bed Providence Memorial Hospital.

EL PASO—Phelps-Dodge Corp., will remodel and improve copper refinery, \$175,000.

EL PASO—Hotel Dieu, Sister Mathilde has

plans in progress, to be released for bids January, 1950, for six-story addition to hospital, \$2,200,000.

FALLS CITY—Falls City Board of Education plans high school; \$225,000 bond issue voted.

FORT WORTH—City plans water mains, \$235,000.

FORT WORTH—City let contract to T. L. James Co., Inc., Kenner, La., \$1,557,454 for paving and incidental construction of Fort Worth International Airport.

FORT WORTH—J. E. Foster & Son, have plans in progress for community center, including Westcliff Theatre, and stores, \$250,000.

FORT WORTH—Riverside Baptist Church, received low bid from Cain & Cain, \$225,000, for church.

FORT WORTH—Taylor-Todd Corp., 1st National Bank Bldg., have plans in progress for 202 residences, Southfort Addition, \$2,000,000.

FORT WORTH—Fort Worth Independent School District, let contract to Quisic Construction Co., 905 First National Bank Bldg., \$243,200, for junior high school and elementary school, Lincoln Ave.

FREESPORT—Brazosport Independent School District let contract to Telespen Construction Co., 1710 Telephone Road, Houston, \$974,574, for high school and swimming pool.

GALVESTON—Medical Branch of University of Texas, received low bid from Pfeiffer Electric Co., La Porte, \$171,938 for electric systems in various buildings.

GALVESTON—City let contract to Chicago Bridge & Iron Co., 5626 Clinton Drive, Houston, \$177,850, for three reservoirs.

GALVESTON—Kane Boiler Works, Inc., let contract to Thomas Bate & Sons, 1107 Girard St., Houston, for boiler works unit, \$147,000.

GALVESTON—University of Texas, Board of Regents, Austin, plans Tuberculosis Hospital, \$300,000.

GALVESTON—Lipton Tea Co., plans plant, \$500,000.

GALVESTON—Sealy & Smith Foundation, seeking additional \$1,000,000 in Federal aid funds for new John Sealy General Hospital now under construction by J. W. Bateson Construction Co., Inc., Moore Bldg., San Antonio, \$4,567,770.

GALVESTON—University of Texas, let contract to Pfeiffer Electric Co., La Porte, \$174,805 for electric wiring of various buildings, Medical Branch.

GARLAND—Garland Independent School District plans junior school, \$275,000.

GATESVILLE—Gatesville Independent School District, plans elementary school, \$400,000.

GEORGE WEST—George West Independent School District let contract to Davis Construction Co., Corpus Christi, \$237,250 for elementary school and gymnasium.

HARLINGEN—City plans election on \$500,000 bond issue for improvements of parks, streets and sanitary sewers.

HONDO—Hondo Independent School District let contract to M. H. Ryland, Uvalde, \$203,825, for high school.

HOUSTON—Rosenstock Motors, Inc., plans auto display building, \$300,000.

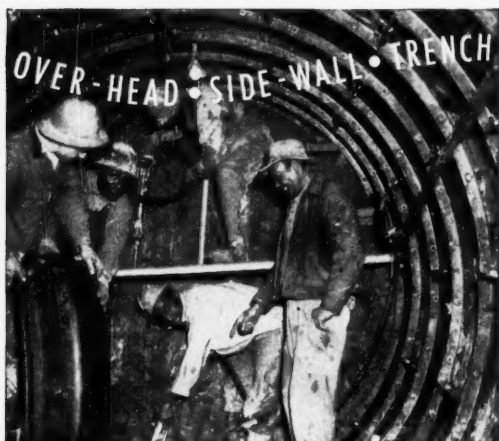
HOUSTON—Houston Independent School District, let contract to Charles R. Baum & Son, 707 Hughes St., \$267,774, for Wesleyan Road School.

(Continued on page 48)

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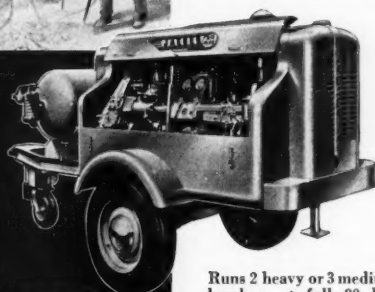
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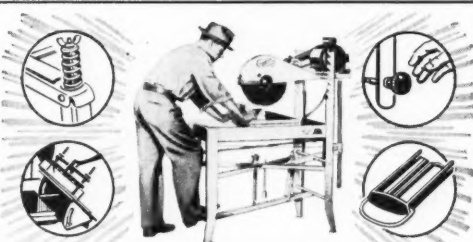
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Southern Construction Projects

TEXAS

(Continued from page 46)

HOUSTON—City plans water mains on Prairie Avenue from Caroline to Hutchins, \$400,000.

HOUSTON—Harris County let contract to Holland Page, 7114 Georgetown Rd., \$143,908, for 6 mi. paving on Garth Rd.

HOUSTON—Harris County let contract to Farnsworth & Chambers Co., Inc., P. O. Box 74, \$128,260, for 6.8 mi. paving on Garrett Rd.

HOUSTON—City received low bid from Russ Mitchell, Inc., 5304 Old Spanish Trail, \$257,719 for storm sewers, Section No. 2, Denver Harbor.

HOUSTON—City and Businessmen, O. H. Carlisle, discussing plans for a \$6,000,000 covered stadium west of Sam Houston Coliseum.

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HOUSTON—Houston Independent School District, let contract to T. D. Howe Construction Co., 3210 White Oak, \$401,000 for Aldine-Westfield and Parker Roads Elementary School.

HOUSTON—J. Weingarten plans remodeling and modernizing store, at 20th and Yale Sts., \$750,000.

HOUSTON—Houston Independent School District, let contract to LeBlanc, Inc., 2518 Huldy St., \$579,254 for additions and alterations to Lamar High School.

HOUSTON—Dredging work is under way for \$10,000,000 Baytown Tunnel.

HOUSTON—Methodist Hospital Board received low bid from Thomas Bate & Sons, 1107 Girard St., \$3,236,900 for hospital at Texas Medical Center.

HOUSTON—Cravens, Dargan & Co., let contract to Farnsworth & Chambers Co., Inc., P. O. Box 74, \$228,297 office building, Hermann Drive.

HOUSTON—City plans sanitary sewers, Lockwood Drive, \$720,000.

HOUSTON—Leo F. Corrigan, Dallas, has plans in progress for four shopping centers, \$3,500,000.

HOUSTON—City let contract to Russ Mitchell, Inc., 5304 Old Spanish Trail, \$257,719 for storm sewers, Section No. 2, Denver Harbor storm sewer system.

HOUSTON—Mae-Dean Corp. has plans in progress for shopping center and theatre at Holmes Rd., Chocolate Bayou Rd. and Brookhaven Ave., \$1,000,000.

HOUSTON—City received low bid from Farnsworth & Chambers Co., Inc., P. O. Box 74, \$258,696, for storm sewers.

HOUSTON—Rice Institute let contract to J. M. Odom, P. O. Box 774, Austin, for boys' and girls' gymnasium, \$1,000,000.

HOUSTON—City plans jail, \$1,500,000.

HOUSTON—Trinity Lutheran Church, 12 Rlesner St., plans \$450,000 program.

HOUSTON—Methodist Hospital and St. Luke's Episcopal Hospital, have plans in progress for power plant at Texas Medical Center, \$700,000.

IRVING—Irving Independent School District plans school buildings; \$450,000 bond issue voted.

JASPER AND TYLER COUNTIES—Corps of Engineers, Galveston, received low bid from Farnsworth & Chambers Co., Inc., P. O. Box 74, Houston, \$264,580, for reservoir clearing, Third Contract Dam "B," Neches River Basin.

JASPER AND TYLER COUNTIES—Corps of Engineers, Galveston, received low bid from Farnsworth & Chambers Co., Inc., P. O. Box 74, Houston, \$495,900, for reservoir clearing, Fourth Contract Dam "B," Neches River Basin.

KAUFMAN—Kaufman County defeated \$1,250,000 bond issue for 125-mi. farm-to-market roads.

KERMIT—Kermit Independent School District, let contract to J. G. Ryan Construction Co., P. O. Box 541, Artesia, New Mexico, \$782,860, for high school and negro school.

KOUNTZE—Kountze Independent School District has plans in progress for alterations and addition to school, \$310,000.

LA MARQUE—LaMarque Independent School District has plans in progress for school facilities, \$350,000.

LAREDO—City approved issuance of \$460,000 bonds for street and bridges.

LAREDO—City approved issuance of \$975,000 bond issue for sanitary sewers.

LOCKHART—Lockhart Independent School District has plans for school program; \$500,000 bonds voted.

LONGVIEW—First Baptist Church, received low bid from J. A. Sharrock, Marshall, \$547,000 for church.

LONGVIEW—City let contract to Thomas Bryan, M & M Bldg., Houston, \$483,870 for water plant improvements.

LUBBOCK—City let contract to Collum and Hodgson, 1005½ 13th St., \$195,190 for distribution mains and appurtenances.

LUBBOCK—Texas Technological College plans student union building, \$500,000.

LUBBOCK—St. John's Methodist Church plan church, \$600,000.

LUFKIN—Board of Education plans negro junior-senior high school, \$275,000.

PASADENA—Pasadena Independent School District plans additions to schools, \$700,000.

PASADENA—City Council allocated \$500,000, for street paving and tunnel bypass.

PASADENA—City Council allocated \$200,000 for sewer work.

PLEASANTON—City approved issuance of \$200,000 bond issue for water extension, sewer collection and disposal system.

PORTLAND—City has preliminary plans in progress for water works extensions and improvements and new sewer system and disposal plant, \$175,000.

POST—Post Independent School District let contract to BMFF Construction Co., P. O. Box 1088, Lubbock, \$208,147 for elementary school.

PRAIRIE VIEW—A & M College of Texas received low bid from Vivrett and Vivrett Builders, Insurance Bldg., Dallas, \$302,893 for girls' dormitory.

SAN ANTONIO—Baptist Memorial Hospital, Inc., 215 Camden St., let contract to H. J. Von Rosenberg, 330 Melrose Place, \$710,400 for maternity hospital.

SAN ANTONIO—Manor Baptist Church, has plans in progress for church, \$200,000, at Manor & Meredith Dr.

SAN ANTONIO—City let contract to Heidenfels Brothers, P. O. Box 1917, Corpus Christi, for West Side Main Sewer, Sections 1 & 11, \$349,715.

SAN ANTONIO—Housing Authority, has approval for 3,000 low-rent housing units, \$400,000.

SAN ANTONIO—Our lady of Lake College, has plans in progress for St. Andrew's Convent, dormitory to house Missionary Catechists of Divine Providence students, at 2302 Old Castrovilla Road, \$130,000.

SAN ANTONIO—San Antonio College received low bid from Victor Prassel Construction Co., Inc., P. O. Box 526, \$418,000 for library-administration building.

SEGUIN—United Methodist Church has plans nearing completion for educational bldg. and social hall, \$300,000.

SEMINOLE—First Baptist Church, let contract to Gilstrap Construction Co., Lubbock, \$231,000, for church.

TAYLOR—Housing Authority, has plans in progress for 70-unit housing project, \$500,000.

TERRELL HILLS—City plans voting in

(Continued on page 50)

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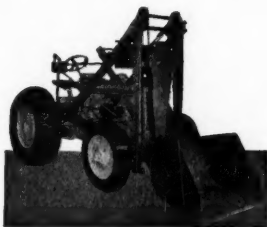
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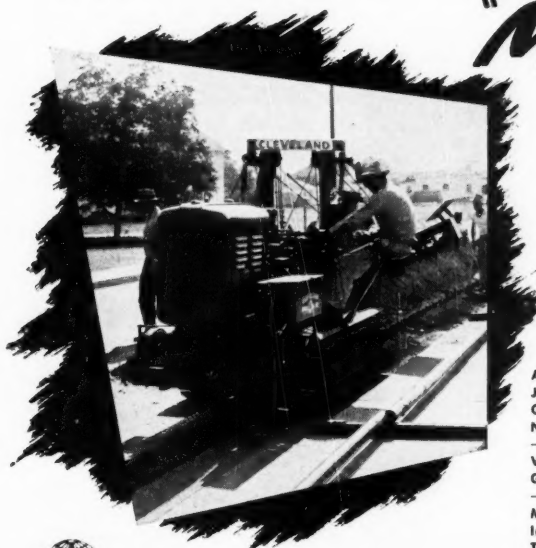
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THE CLEVELAND TRENCHER CO. 20100 ST. CLAIR AVENUE, CLEVELAND 17, OHIO

Southern Construction Projects

TEXAS

(Continued from page 48)

February, 1950 on \$450,000 bond issue for municipal improvements.

TEXAS CITY—Pan American Refining Corp., let contract to Telepsen Construction Co., 1710 Telephone Rd., Houston, for refinery, \$250,000.

TEXAS CITY—Corps of Engineers, Galveston, will hold public hearing at Texas City, on proposed extension of Texas City seawall and levee system, \$5,512,000.

VICTORIA—Victoria Independent School District, plans school building program; \$390,000 bond issue voted.

WACO—Baylor University received low bid from Swigert Construction Co., 8th and Spreight Sts., \$849,095 for stadium.

WACO—Columbus Avenue Baptist Church, received low bid from C. L. Hendricks & Son, P. O. Box 956, \$525,974, for three-story edu-

cational bldg. and one-story chapel bldg.

WACO—Baylor University let contract to S. B. Swigert, 8th & Speight, \$849,095 for excavation and grading for new stadium.

WHITNEY—Corps of Engineers, Galveston, let contract to Winston Brothers Co., 1170 Northwestern Bank Bldg., Minneapolis, Minn., \$1,830,966, for relocation of M. K. & T. Railroad, De Leon Division, Whitney Dam and Reservoir, Brazos River Basin.

VIRGINIA

State Board of Education, Richmond, approved loans for construction of schools in three Virginia counties as follows: \$100,000 for Blacksburg High School in Montgomery County; \$660,000 for Dublin High School in Pulaski County; \$50,000 for Washington-Reid Elementary School in Prince William County.

ACCOMACK COUNTY—Accomack Northampton Electric Coop., Parksley, let contract

to City Construction Co., Norfolk, for headquarters warehouse, \$61,249.

ARLINGTON—Board of Education, 2732 Wilson Blvd., let contract to Wise Contracting Co., 8th & Grace, Richmond, for Stratford Junior High School, \$1,452,721.

BRUNSWICK COUNTY—Board of Education let contract to Mottley Construction Co., Farmville, \$824,870, for Negro high school.

CHARLESTON—West Virginia Water Service Co. sold \$1,000,000 first mortgage bonds to New York Life Insurance Co. to proceeds from the sale will refund \$500,000 of first mortgage bonds and will provide funds for construction.

CHARLOTTESVILLE—Dr. Frank B. Stafford, Blue Ridge Sanatorium, let contract to Ivy Construction Co. for nurses home, \$236,121.

CHARLOTTESVILLE—City and Albemarle County approved \$1,200,000 bond issue for joint high school.

FAIRFAX—Fairfax County plans proposed \$12,000,000 school construction program.

FALLS CHURCH—Falls Church Public Schools, 1057 W. Broad St., approved \$700,000 bond issue for school construction.

FREDERICKSBURG—Mary Washington College of the University of Virginia let contract to C. E. Nuckols, Richmond, for alterations and additions to dining hall, \$324,583.

HARRISONBURG—Rockingham County School Board let contract to English Construction Co., Main St., Altavista, \$764,740, for high and elementary schools.

ISLE OF WIGHT COUNTY—Board of Education received low bids from the following for addition to Isle of Wight Training School: S. S. Kea, Ivor, \$129,412; Camptown Negro Elementary School, G. E. Nuckols, Richmond, \$65,021; Windsor Consolidated Negro Elementary School, C. E. Nuckols, Richmond, \$78,674.

JONESVILLE—Powell Valley Elec. Coop. let contract to Killoren Elec. Co., Appleton, Wis., for 176.6 miles of line, \$260,300.

NORFOLK—Corps of Engineers received low bid from A. A. Holmes Construction Co., Cartersville, Ga., for clearing 2,281 acres of land in Buges Island reservoir, \$148,450.

RICHMOND—Virginia Museum of Fine Arts has allocation of \$1,000,000 for addition to the north and west of present structure.

RICHMOND—Board of Education received low bid from Conquest, Moncure & Dunn, \$368,517, for alterations and additions to Helen Dickinson School.

RICHMOND—City, Director of Public Works, seeking Federal funds for \$168,000 building program at Byrd Airport for 1949-50.

RICHMOND—Westhampton Methodist Church received low bid from James Fox & Sons, for church, \$104,250.

RICHMOND—Department of Highways received low bids for projects in following counties:

Campbell—US 29, 2.372 mi. reinf. conc. 24-ft. wide, joining improvement project currently underway north of Altavista; William F. Bowe & Co., Augusta, Ga., \$205,412.

Campbell—Sec. Rt. 625, 3.53 mi. reconstr. and hard surf. near Naruna; J. R. Ford Co., Inc., Lynchburg, \$36,588.

Fauquier—Sec. Rts. 643 and 616, 4.65 mi. stab. base and 1.16 mi. hard surf.; W. W. Sanders, Warrenton, \$64,575.

Hanover—Sec. Rt. 620, 3.62 mi. reconstr. and hard surf.; Highway Paving Co., Richmond, \$37,449.

(Continued on page 32)

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Larger plant is 3 years old, equipped with two-ton mixer and 60-ton bin—80 to 90 tons per hour.

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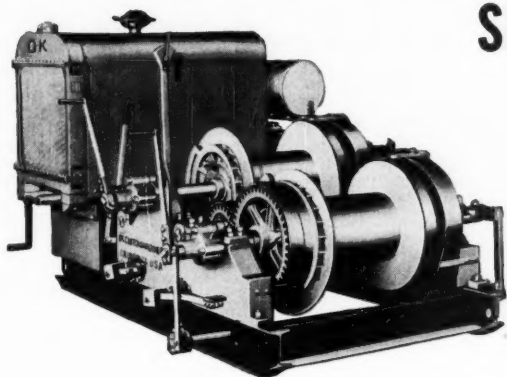
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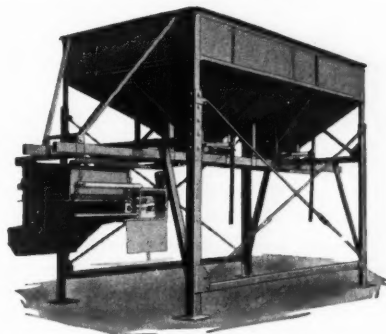
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Southern Construction Projects

VIRGINIA

(Continued from page 50)

RICHMOND—Department of Highways let contracts for projects in following counties: **Stafford and Fauquier**—Rt. 17, 7.16 mi. reinf. conc. pvt. and bridges over Sylvan Run and Deep Run; Bero Engineering & Construction Corp., Hampton, \$498,180.

Augusta—US Rt. 11, 1.61 mi. four-lane divided north from Augusta-Rockbridge line; Echols Brothers, Inc., Staunton, \$183,961. **Albemarle**—Rt. 302, 0.94 mi. 22-ft. macadam south of Buena Vista; B. D. Gentry Construction Co., Walnut Cove, N. C., \$79,865.

Rockbridge—US Rt. 501, 0.57 mi. 22-ft. macadam south of Buena Vista; B. D. Gentry Construction Co., Walnut Cove, N. C., \$79,865. **Gloucester**—Sec. Rt. 601, 4.46 mi. stabilized base between Cash Post Office and Glenns; W. H. Scott, Franklin, \$36,527.

ROANOKE—Roanoke Area Boy Scouts let contract to Trinkle and Dobyns, Dublin, for scout camp near Pulaski, \$90,000.

YORKTOWN—Oskar J. W. Hansen, Charlottesville, has been commissioned to repair Memorial Statue; \$65,000 appropriated.

RICHMOND—Crawford Manufacturing Co. let contract to E. L. Bass & Brothers, 708 Bainbridge St., for addition, 3rd & Decatur Sts., \$160,000.

RICHMOND—Nolde Brothers, Inc., let contract to James Fox & Sons, Inc., 2501 E. Franklin St., for alterations and additions, 2510-12 E. Broad St., \$169,000.

WEST VIRGINIA

ATHENS—West Virginia Board of Education let contract to E. F. Farrott Co., Boxley Bldg., Roanoke, Va., for science building at Concord State College, \$333,922.

CHARLESTON—State Road Department received low bids for projects in following counties:

Jackson—Proj. S 573(1), Alpine Ridge Rd.; Andersons', Inc., Charleston, \$106,370.

Raleigh and Wyoming—Proj. No. 7098, Jenny Gap-Maben Rd.; Brown & Wright, Princeton, \$132,432.

Roane—Proj. No. 6878, Long Run Ridge Rd.; Andersons', Inc., Charleston, \$92,023.

Summers—Proj. No. S 600(1), Hinton Mercer County Line; Sutton Co., Inc., Rgford, \$195,316.

Webster—Proj. No. 5487, Braxton County Line Rd.; Keeley Construction Co., Clarksburg, \$231,536.

CHARLESTON—State Road Commission

received low bids for projects in following counties:

Putnam—Proj. No. 242(4), Little Hurricane Creek Bridge; Monty Brothers, St. Albans, \$47,255.

Wood—Proj. No. F-306(8), Pond Creek Bridge #1793 over Pond Creek; Boso & Ritchie, Inc., Ravenswood, \$148,886.

CHARLESTON—State Road Commission received low bids for projects in following counties:

Clay—Proj. No. 7740—7.19 mi. Maysel Dink Rd.; Standard Asphalt & Tar Co., Charleston, \$184,037.

Fayette—Proj. No. F1-263(13), 0.87 Glen Ferris-Gauley Bridge Road; Boso & Ritchie, Inc., Ravenswood, \$535,075.

Marshall—Proj. No. 5665, 6.55 mi. Beelers Station-Moundsville Rd.; Harman Brothers, Grafton, \$184,959.

McDowell—Proj. No. 5391, Jol. Virginia St. Line; Brown & Wright, Princeton, \$181,275.

Putnam—Proj. No. 7571, 0.81 mi. Buffalo-Hugo Rd.; Charleston Construction Co., \$144,114.

Webster—Proj. No. 5487, 5.672 mi. Braxton County Line Rd.; Atlas Engineering & Polino, Elkins, \$171,338.

CHARLESTON—State Road Commission let contracts for projects in following counties:

Wood—Proj. F-306(8), Pond Creek Bridge #1793, 2—106' & 1—133' continuous conc. substructure; Boso & Ritchie, Ravenswood, \$148,886.

Putnam—Proj. No. S-242(4), Little Hurricane Creek bridge #1813, 2—55' and 1—63' continuous steel I-beam spans on conc. substructure; Monty Brothers, St. Albans, \$47,255.

CHARLESTON—Building Commission for State of Virginia let contract to J. A. Jones Construction Co., 209 W. Fourth, Charlotte, N. C., for office building # 3; \$22,280,700.

HUNTINGTON—State Board of Education, Charleston, received low bids from the following for equipment at Marshall College Science Building: Contract No. 9, general laboratory equipment, E. H. Sheldon & Co., Muskegon, Michigan, \$462,834; Contract No. 11, sterilizing equipment, Ohio Chemical and Manufacturing Co., Madison, Wisconsin; Contract No. 12, animal room equipment, George H. Wammann Manufacturing Co., 1123 E. Baltimore St., Baltimore, Md.; Contract No. 14, museum display cases, Remington Rand Co., 646 Main St., Cincinnati, Ohio, \$19,793; Contract No. 15, woodworking machinery, J. L. Cook Hardware Co., Huntington; Contract No. 16, window shades, M. T. Dickey, Jr., 915 Francis Court, Huntington; Contract No.

17, chairs, West Virginia Seating Co., 837-839 Second St., Huntington, \$19,894.

MORGANTOWN—Tucker and Silling, Charleston, Archts., have been selected for West Virginia University's new \$4,000,000 building program.

Traffic Zoning Paint

Full-scale production has been resumed by the Thomson-Porellite Paint Company on Porellite traffic zoning paint. Practical maintenance men, in competitive tests, are said to have found this to be the longest wearing, most easily applied, and most economical line-marking paint available. It adheres to factory floor, street, and parking lot, regardless of the surface and holds its color and visibility for a long period.

Special features of Porellite traffic zoning paint are that it resists stains and scuffing, and withstands all types of traffic from the heaviest machine load to plain foot traffic; it dries hard so quickly that in 20 to 30 minutes after application the heaviest truck can run over lines without the slightest harm to the markings.

For further information write the industrial sales division of Thomson-Porellite Paint Co., 330 Race Street, Philadelphia 6, Pennsylvania.

New Floor Furnace

Lennox Furnace Co., Marshalltown, Iowa, announces a new floor furnace designed so it can be completely serviced from inside the home and with a control assembly simple enough to change conveniently for production in its Ft. Worth factory. The line is divided into two types: flat grille models ranging in size from 32,500 to 60,000 BTU input, and the dual wall models at 45,000 and 60,000 BTU input.

These newly designed models feature a heat exchanger that is completely removable in less than two minutes by simply loosening 4 small bolts from above the floor. By lifting out the inner liner assembly the burner can be adjusted by turning the primary air adjusting screw which is in the top side of the casing bottom. All models, regardless of the manual or automatic controls used, are operated with a single control rod which regulates the burner and pilot.

Because of its minimum dimensions, 23 inches to the bottom of the casing from the grille and 26 inches to the bottom of the controls, this floor furnace requires no concrete or copper-lined pit for protection against water hazards.

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(Continued from page 32)

"The magnitude of the needs points up the size of the public's stake in an adequate highway program. Over the last Labor Day weekend it is estimated 30,000,000 motor vehicles occupied our highways in the three-day period. The 40-odd percentage increase in the number of cars registered since war's end brought about a situation in which all the cars there were four years ago took to the highways simultaneously on roads and streets which patently had not been prepared for any such excursion. Will the same thing happen four years from now? At that time, will 43 million cars, the number we have today, be turned loose on our highways? If so, there isn't a chance in the world of our highways being ready for them.

"On the other hand, if the increase in motor vehicle registration drops materially, some serious consequences are bound to result in our national economy. Can we expect to keep on breaking production records in the manufacture of automobiles without any place to use them?

"These are problems of which the public must be made aware, and no greater job faces the highway industry and profession. Unless the public is alerted to the benefits of investing in an adequate highway system and to the dangers and waste lurking in our present inadequate system, America's road builders cannot hope to proceed with the program of improvements, necessary though that program may be."

Crosshead Guide Assembly

Ralph B. Carter Co. of Hackensack, N. J., recently announced a new modified design optional for its entire line of plunger sludge pumps, the Crosshead Guide Assembly, which will result in greatly increased pumping efficiency and cuts maintenance "down time." It can be furnished when specified on both Carter standard and balto models in all three sizes, single, double and triple plunger. It consists of a steel crosshead guide rod, rigidly secured to each plunger; the guide rod travels through bronze guide bearings in a vertical plane with the plunger. The bronze guide bearings are securely mounted on and supported by the vertical stanchion of the pump base; so the crosshead guide is located perpendicular to the eccentric motion of the connecting rod.

Kesterke Appointed Sales Representative

Appointment of Walter A. Kesterke as sales representative for industrial grinding wheels in Wisconsin and southwest Michigan, was recently announced by J. A. Fairfield, manager of grinding wheel sales, U. S. Rubber Co.

USED EQUIPMENT IN GOOD CONDITION AT BARGAIN PRICES

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LOCOMOTIVE CRANES: 15 ton Brownholt steam in good condition, \$1495.00.

DIESEL GENERATOR: 37.5 KVA Caterpillar New. **COMPRESSORS:** new 60 and 88 CFM electric and 315 CFM 1R portable diesel.

TOURNAPULLS: LeTourneau D-4 scraper and dozer combinations 2.3 yds.

DOZERS: Caterpillar D2 and RD-6.

TRACTOR SCRAPERS: AC Model L with Garwood 8 yd. scraper—\$1600.00.

DITCHER: P&H gas digs 20 feet by 42 inches. Bargain.

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— C —		HERMITAGE PORTLAND CEMENT CO.		SMITH ENGINEERING WORKS	
CAREW STEEL PRODUCTS CORP.		Agency—George H. Hartman Co.		Agency—Cramer-Krasselt Co.	
Agency—W. H. Long Co.		HUBER MANUFACTURING COMPANY		STA-VIS OIL CO.	
CATERPILLAR TRACTOR COMPANY		Agency—Jay H. Maish Company		STOCKBRIDGE STONE CO. (Georgia State Section Only)	
Agency—N. W. Ayer & Son, Inc.		— I —		Agency—Silver & Souce Co.	
CELOTEX CORPORATION		INDEPENDENT PNEUMATIC TOOL CO.		STONE MACHINE CO., INC.	
Agency—MacFarland, Aveyard & Co.		Agency—Edgar Walter Fischer		Agency—Flack Advertising Agency	
CHATTANOOGA BOILER & TANK CO.		INTERNATIONAL HARVESTER CO.		SYDNOR PUMP & WELL CO., INC.	
Agency—The Purse Co.		Agency—Aubrey, Moore & Wallace, Inc.		— T —	
CHRISTHILL & CO., INC., STUART M. (Maryland State Section Only)		Agency—Krauss & Rubien		TENNESSEE COAL, IRON & RAILROAD CO.	
CLEVELAND TRENCHER COMPANY		IOWA MANUFACTURING COMPANY		Agency—Batten, Barton, Durstine & Osborn	
Agency—Cates-Bourgeois		Agency—Russell T. Gray, Inc.		THOMPSON & GREEN MCHY. CO. (Tennessee State Section Only)	
CLIPPER MFG. CO.		— J —		TINNEY DRILLING CO.	
Agency—Potts-Turnbull Co.		JAEGER MACHINE COMPANY		Agency—Mumm, Mullay & Nichols	
COLUMBIA ENGINEERING EQUIP. CO.		Agency—Arnold Andrews		TRI-STATE, INC. (Georgia State Section Only)	
COLUMBIA STEEL CO.		Agency—Arnold Andrews		Agency—Charles A. Rawson	
Agency—Batten, Barton, Durstine & Osborn		— K —		TRUITT MFG. CO. (North Carolina State Section Only)	
CONCRETE SURFACING MACHINERY CO.		KOEHRING CO.		Agency—Allen Krohn Co.	
CONSTRUCTION EQUIPMENT CO. (Alabama State Section Only)		Agency—Arnold Andrews		TWIN STATES EQUIPMENT CO. (North & South Carolina State Sections Only)	
CONSTRUCTORS SUPPLY CO., INC. (North Carolina State Section Only)		— L —		— U —	
CONTRACTORS SERVICE, INC. (North Carolina State Section Only)		LACLED STEEL COMPANY		UNDERPINNING & FOUNDATION CO.	
Agency—George H. Hartman Co.		Agency—Excelsior-Rankin		UNITED STATES RUBBER COMPANY	
CUMMER & SON CO., F. D.		LINK-BELT SPEEDER CORPORATION		Agency—Fletcher D. Richards, Inc.	
— D —		Agency—Don Proctor, Advertising		UNITED STATES STEEL EXPORT CO.	
DAVEY COMPRESSOR CO.		LITTLEFORD BROS., INC.		Agency—Batten, Barton, Durstine & Osborn	
Agency—Falm & Patterson		Agency—Hartman Co.		UNIVERSAL FORM CLAMP CO.	
DETROIT DIESEL ENGINE DIV.—G. M. CORP.		— M —		Agency—Ross Llewellyn, Inc.	
Agency—Kudner Agency, Inc.		MARION POWER SHOVEL COMPANY		UNIVERSAL PRODUCTS CO. (Georgia State Section Only)	
DICKY CLAY MANUFACTURING CO., W. S.		Agency—Law H. Maish Co.		— V —	
DRAYO-DOYLE COMPANY		McGHAN PATENT SCAFFOLDING CO. (Maryland State Section Only)		VICTOR ENGINEERING CORP.	
— E —		MOTT CORE DRILLING COMPANY		Agency—J. C. Smudin Advtg. Art Service	
ECONOMY FORMS COMPANY		— N —		VIRGINIA BRIDGE COMPANY	
Agency—The Blakemore Company		NESBITT EQUIPMENT CO. (Maryland State Section Only)		VIRGINIA ENGINEERING CO., INC.	
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Agency—Van Sant, Purdell & Co.		Agency—Russell T. Gray, Inc.		— W —	
ELPHINSTONE, INC., D. C. (Maryland State Section Only)		— O —		WALLER PAYING CO.	
EUCLED ROAD MACHINERY CO.		O.K. CLUTCH & MACHINERY CO.		WAPPAT, INC., FRED W.	
Agency—Bayless-Kerr Company		Agency—Ollan Advtg. Agency, Inc.		Agency—W. S. Hill Co.	
— F —		OLIVER CORPORATION, CLETRAC DIV.		WELLMAN ENGINEERING CO.	
FALLSWAY SPRING & EQUIPMENT CO.		Agency—The Buchen Company		Agency—Grieswald-Eshleman Co.	
(Maryland State Section Only)		— OSGOOD COMPANY		WHITE MANUFACTURING COMPANY	
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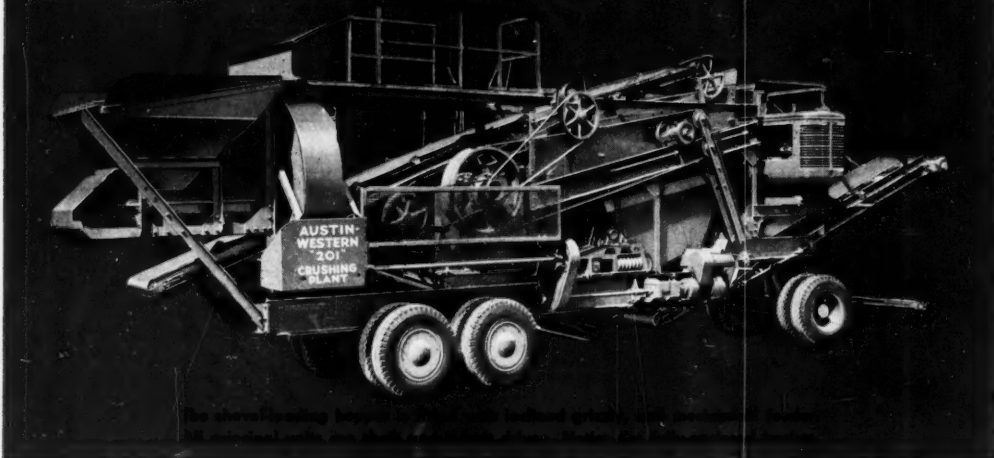
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